

**Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)**

SUMMARY RECORD OF THE EIGHTH (8th) MEETING OF EXPERT APPRAISAL COMMITTEE HELD ON 27TH – 28TH JUNE, 2016 FOR ENVIRONMENTAL APPRAISAL OF INDUSTRY-I SECTOR PROJECTS CONSTITUTED UNDER EIA NOTIFICATION, 2006.

The eighth meeting of the Expert Appraisal Committee (EAC) for Industry-I Sector in terms of the provisions of the EIA Notification, 2006 for Environmental Appraisal of Industry-I Sector Projects was held on 27th – 28th June, 2016 in the Ministry of Environment, Forest and Climate Change. The list of participants is annexed.

After welcoming the Committee Members, discussion on each of the agenda items was taken up ad-seriatim.

8.2 Confirmation of the minutes of the 7th Meeting

The minutes of the 7th meeting, as circulated were confirmed.

8.3 ENVIRONMENTAL CLEARANCE (EC)

8.3.1 Integrated Steel Plant (Sinter plant: 18,50,000 TPA, blast furnace: 10,05,000 TPA, DRI plant: 6,50,000, SMS:10,00,000 TPA, Rolling Mill:7,25,000 TPA, CPP:75 MW, Supporting utilities like RMH yard, Oxygen Plant, DM Plant, Lab, HVAC, Air compressor, DG sets, etc of **M/s Jindal Saw Ltd., near village Pur, tehsil and district Bhilwara, Rajasthan. [F. No. J-11011/293/2014-IA.II(I)]**

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (M/s EMTRC Consultants Pvt.) gave a detailed presentation on the salient features of the project. The proposed Integrated Steel Plant of M/s Jindal Saw Limited located in Village Pur Tehsil and District Bhilwara State Rajasthan was initially received in the Ministry on 26.8.2014 for obtaining Terms of Reference (TOR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 22nd meeting held on 18th and 19th September, 2014 and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry of Environment and Forests had prescribed TORs to the project on 17.11.2014. An amendment in the TORs were prescribed on 11.9.2015.

Based on the TORs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 23.5.2016.

The project of M/s Jindal Saw Limited located in Village Pur, Tehsil and District Bhilwara is for setting up of a new steel plant for production of 1.0 MTPA of billets / rounds and TMT bars through Blast Furnace - Basic Oxygen Furnace (BOF) - Sponge Iron Plant (DRI) - Ladle Refining Furnace-Vacuum Degassing (VD) / Vacuum Oxy Decarburization (VOD) - Continuous Casting - Rolling Mill route. The name and production capacity of each units of the proposed integrated steel plant is given below:

S. No.	Name of Unit	Size of the unit	Production capacity
1	Blast Furnace	1200 cu.m	10,65,000 TPA Hot Metal
2	DRI Plant	4 x 500 TPD	6,50,000 TPA Sponge Iron
3	Basic Oxygen Furnace (BOF)	100 tons	10,00,000 TPA Liquid Steel
4	Steel Refining	LRF + VD / VOD	100 t with matching capacity BOF
5	Continuous Casting Machine	9/16, 5-strand combi-caster	10,00,000 TPA Steel Rounds and Billets
6	Rolling Mill	Rebar / TMT	7,25,000 TPA
7	Captive Power Plant	75 MW	Through recovery of waste heat and gases
8	Supporting Utilities	-	RMH Yard, DM Plant, Oxygen Plant, Laboratory,
9	Pellet Plant	Pellets plant	15,00,000 TPA

The total land required for the project is 76 acres, which is barren land (100% is Government Land). No forestland involved. Out of 76 acres mentioned above, 48 acres land has been acquired for the project and allotment of 28 acres by state government is under process. No River or stream passes through the project area. It has been reported that no water body exist around the project and modification / diversion in the existing natural drainage pattern at any stage has not been proposed. The topography of the area is flat and reported to lies between The Latitude is 25°18'56.32" to 25°19'57.12" N and Longitude is 74°32' 15.76" to 74°33'4.86" E in Survey of India Toposheet No at an elevation of 440 m AMSL. Groundwater will not be taken for the project.

No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project.

The iron ore for the plant would be procured from adjacent mines owned by Jindal Saw Limited. The iron ore transportation will be done through conveyors. The list of raw material for the Pellet Plant (1.5 MTPA) is as following:

S. No	Name of raw material	Yearly Quantity (tons)	Source	Mode of Transport
1.	Iron ore concentrate	15,05,794	Own plant located inside the iron ore mine	By conveyor
2.	Coal	42000	Import	By road
3.	Bentonite	13553	Rajasthan / Gujarat	By road

4	Lime	1506	Rajasthan	By road
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Following is the list of Raw material for Blast Furnace:

S. No	Name of raw Material	Yearly Quantity (tons)	Source	Mode of Transport
1.	Coke	4,50,000	Own Plant at Mundra + Purchase	By road
2.	Coal Fines (PCI)	1,70,000	Import	By sea + Road
3.	Flux (limestone, quartzite, etc)	42,000	Rajasthan	By road
DRI Plant				
1.	Coal	5,20,000	Import	By road
2.	Dolomite	50,000	Rajasthan, MP	By road
SMS				
1.	Steel Scrap	75,000	Recycling/purchase	By road
2.	Lime	75,000	Rajasthan	By Road
3.	Ferro Alloys	15,000	Rajasthan, MP	By Road

The water requirement of the project is estimated as 13850 m³/day. Jindal Saw Limited will use treated Sewage water of Bhilwara town. No freshwater will be used. The power requirement of the project is estimated as 90 MW out of which 75 MW will be obtained from proposed captive power plant and balance from grid. It has been reported that there are no people are present in the core zone of the project. No R&R is involved.

Ambient air quality monitoring has been carried out at 8 locations during October 2014 to December 2014 and the data submitted indicated PM₁₀ (44 µg/m³ to 68 µg/m³), PM_{2.5} (15 µg/m³ to 29 µg/m³), SO₂ (4.0 µg/m³ to 8.8 µg/m³) and NO₂ (9.0 µg/m³ to 21.8 µg/m³). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 4.9 µg/m³ with respect to the PM₁₀, 14.4 µg/m³ with respect to the SO₂ and 7.7 µg/m³ with respect to the NO_x.

It has been reported that 27000 tons/month blast furnace slag shall be given for cement making, 6000 tons/month dolochar shall be given for power generation. 8000 tons per month SMS slag shall be partially reused in blast furnace and balance converted to slag balls and sold. 400 tons per month mill scales will be reused in pellet plant. It has been envisaged that an area of 25.4 acres (33% of 76 acres) will be developed as greenery to attenuate the noise levels and trap the dust generated due to the project development activities.

The Public hearing of the project was held on 19.1.2016 at Darak Stadium, Pur Village for setting up of the proposed steel plant, under the chairmanship of ADM. The issues raised during

public hearing are related to employment in the project and infrastructure development in nearby villages.

The capital cost of the project is Rs.2000 Crores and the capital cost for environmental protection measures is proposed as Rs.152 crores. The annual recurring cost towards the environmental protection measures is proposed as Rs 15 crores. The proponent has mentioned that there is no court case to the project or related activity.

Based on the presentation made and discussions held, the Committee desired additional information on the following for further consideration of the proposal:

- i. Action plan for PH issues
- ii. Revised water, material balance and energy balance
- iii. Details of gas balance
- iv. A certificate from chief wildlife warden regarding the proximity of NP/WLS within 10 km radius.
- v. Detailed control measures for reducing SO_x and NO_x emissions before, during and post processing
- vi. Details regarding Full time veterinary health care center
- vii. CSR to be revisited wrt to PH
- viii. Copy of land acquisition document/notification

8.3.2 Environmental Clearance for existing 1.2 MTPA Pellet Plant of **M/s Jindal Saw Ltd.**, installed and Commissioned at vill. Pur, dist. Bhilwara, Rajasthan (ToR vide NGT Judgement dated 27.05.2014) [(F.No.- **J-11011/371/2014-IA.II(I)**)]

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (M/s EMTRC Consultants Pvt.) gave a detailed presentation on the salient features of the project. The application for grant of ToRs for the installed and commissioned Pellet Plant of M/s Jindal Saw Limited was initially received in the Ministry on 1.12.2014, for regularization of the Pellet Plant as per NGT judgement dated 27.5.2014. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 29th meeting held on 11th – 12th December, 2014 and prescribed TORs to the project for undertaking detailed EIA/EMP study for the purpose of obtaining environmental clearance. Accordingly, the MoEFCC had prescribed TORs to the project on 7.4.2015.

Based on the TORs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 23.5.2016.

The proposal of M/s Jindal Saw Limited located in Village Pur, Tehsil and District Bhilwara is for regularization of 1.2 MTPA pellet plant and increasing its capacity for production of 1.5 MTPA of Pellets (expansion by operating the plant for 330 days instead of 300 days and process optimization). The total land required for the project is 40.76 acres, which has been acquired for the project. No forestland involved. No River or stream passes through the project area. It has been reported that no water body exist around the project and modification / diversion in the existing natural drainage pattern at any stage has not been proposed. The topography of the area is flat and reported to lies between The Latitude is 25°18'56.32" to 25°19'13.7" N and Longitude is 74°32'16.07" to 74°33'29.93" E and located at an elevation of 440 m AMSL. Groundwater will not be taken for the project. No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project.

Following table presents the basic raw material used in process for 1.2 MTPA Pellet Plant

Input Materials	Quantity (TPA)	Output Materials	Quantity (TPA)
Iron ore concentrate	1204635	Pellet	1200000
Bentonite	10842	Pellet Fines	24490
Lime	1205	Dust	3614
Dust (recycled)	3614	Burnt loss	28330
Coal fines	36139		
Total	1256434	Total	1256434

The targeted production capacity of the pellet plant is 1.5 MTPA. The iron ore fines for the pellet plant are procured from adjacent mines owned by Jindal Saw Limited. The iron ore fines is converted to iron ore concentrate inside the mines. The iron ore concentrate transportation is done through conveyors.

The water requirement of the project is estimated as 264 kl/day. Jindal Saw Limited will use treated Sewage water of Bhilwara town. No freshwater will be used. The power requirement of the project is estimated as 5.6 MW which is obtained from grid. It has been reported that there are no people are present in the core zone of the project. No R&R is involved.

Ambient air quality monitoring has been carried out at 8 locations during October 2014 to December 2014 and the data submitted indicated: PM₁₀ (44 µg/m³ to 68 µg/m³), PM 2.5 (15 µg/m³ to 29 µg/m³), SO₂ (4.0 µg/m³ to 8.8 µg/m³) and NO₂ (9.0 µg/m³ to 21.8 µg/m³). The results of the modeling study indicate that the maximum increase of GLC for the proposed project is 4.9 µg/m³ with respect to the PM₁₀, 14.4 µg/m³ with respect to the SO₂ and 7.7 µg/m³ with respect to the NO_x.

It has been reported that 2000 tons/month dust from ESP and Bag Filters shall be reused for pellet making. It has been envisaged that an area of 13.5 acres (33% of 40.76 acres) is under greenery development to attenuate the noise levels and trap the dust generated due to the project development activities.

The Public hearing of the project was held on 19.1.2016 for the installed and commissioned pellet plant along with the proposed integrated steel plant, under the chairmanship of ADM. The issues raised during public hearing are related to employment in the project and infrastructure development in nearby villages.

The capital cost of the project is Rs. 324.27 Crores and the capital cost for environmental protection measures is proposed as Rs 15 crores. The annual recurring cost towards the environmental protection measures is proposed as Rs. 40 Lakhs. The proponent has mentioned that there is no court case to the project or related activity.

The Committee after detailed deliberation decided that since the NGT order pertains to regularization of the existing pellet plant, therefore, the proposal for environmental clearance of the existing capacity of pellet plant of 1.2 MTPA capacity can be considered for appraisal. Proponent has to apply afresh for the expansion of the pellet plant as per the requirement.

Based on the presentation made and discussions held, the Committee recommended the project for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

- i. The project proponent should install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.
- ii. Continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), bag house, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm³ and installing energy efficient technology.
- iii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- iv. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.
- v. Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.
- vi. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.
- vii. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act whichever are more stringent.
- viii. Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office, SPCB and CPCB.
- ix. A time bound action plan shall be submitted to reduce solid waste generated due to the project related activity, its proper utilization and disposal.
- x. A Risk and Disaster Management Plan shall be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xi. Green belt over 33% of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area and along road sides etc. by planting native and broad leaved species in consultation with local DFO, local community and as per the CPCB guidelines.

- xii. The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xiii. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.
- xiv. The project proponent shall provide for LED lights in their offices and residential areas.
- xv. At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.
- xvi. In addition to the above provision of ESC, the proponent shall prepare a detailed CSR Plan for the next 5 years including annual physical and financial targets for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Skill Development and infrastructure etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
- xvii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities mandatorily such as LPG for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

8.3.3 Expansion of paper production capacity from 70 to 180 TPD and expansion of agro residue pulp production capacity from 15 to 120 TPD of **M/s Silvertoan Papers Limited** at village Makhiyali, Dist. Muzaffarnagar, U.P. [F. No. J-11011/69/2013-IA.II(I)]

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (J.M. EnviroNet Pvt. Ltd.) gave a detailed presentation on the salient features of the project. Application for Expansion of Paper Production Capacity was initially received in the Ministry on 23rd January, 2013 for obtaining Terms of Reference (TOR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry)

[EAC-I] during its meeting held on 04th April, 2013 (Reconsideration presentation was held on 18th March, 2014) and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry had prescribed TORs to the project on 19th May, 2014.

Based on the TORs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 18th May, 2016.

The project of M/s. Silvertan Papers Limited located near village Makhiyali, Tehsil & District Muzaffarnagar (Uttar Pradesh) is for expansion of Paper Production Capacity (70 to 180 TPD) & Agro Residue Pulp Production Capacity (15 to 120 TPD). The total plant area is 4.46 ha and proposed expansion will be done within the existing plant premises. An area admeasuring 0.986 ha of area has already been developed under greenbelt development/plantation but to make it to 33% of the total plant area, 0.72 ha of additional land which is already acquired by the company has been proposed to be developed under greenbelt development/plantation as a part of proposed expansion. No forest land is involved. No River passes through the project area. The topography of the area is flat and reported to lies between 29⁰28'00.15'' N to 29⁰28'08.70''N Latitude and 77⁰47'05.60''E to 77⁰47'20.15''E Longitude in Survey of India toposheet no. 53 G/10 at an elevation of 248 m AMSL. The ground water table reported to ranges between 9.0 to 13.5 m during pre-monsoon period and 6.4 to 9.8 m during post monsoon period. Based on the Hydrogeological study, it has been reported that the radius of influence of the pumped out water will be 300 meter. Further the stage of ground water development is reported to be 33.66% in buffer zone and thereby these are designated as safe.

No National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve/ Elephant Reserve, Reserve Forest/ Protected Forests etc are reported to be located in the core and buffer zone of the project.

The targeted production capacity of the paper is 180 TPD, Agro residue pulp is 120 TPD. The raw materials required for the proposed expansion of agro pulp and kraft paper are wheat straw (45 MT/Day), Bagasse (80 MT/Day), Sarkanda (24 MT/day), Caustic lye (30 MT/Day), waste paper (130 MT/Day), waste paper imported (25.85 MT/Day), alum (13.3 MT/Day) and rosin (1.02 MT/Day). The raw materials such as wheat staw, bagasse, sarkanda, waste paper will be transported by trucks and rest of the raw materials like caustic lye, alum, rosin will be transported through Road by tankers.

Water requirement for existing plant is 1876 m³/ day and after expansion will be 3913 m³/day. Source of water is being/will be ground water. Permission for withdrawal of ground water (2700 KLPD) has already been obtained & application for obtaining permission for withdrawal of rest ground water to CGWA has already been submitted. However, it was committed by the proponent that the water utilization for the plant will not cross the limit of 2700 KLPD for which the permission is already obtained.

The power requirement of the project is estimated as 4.3 MW, out of which 3.60 MW will be sourced from Captive Cogeneration Power Plant, and rest 0.8 MW will be sourced from UPPCL.

Ambient air quality monitoring has been carried out at 8 stations during April to June, 2014 and the data submitted indicated: PM₁₀ (65.6 to 92.4 µg/m³), PM_{2.5} (29.4 to 43.1 µg/m³), SO₂ (6.3 to 11.6 µg/m³) and NO_x (15.4 to 27.1 µg/m³). The results of the modeling study indicates that

the maximum increase of GLC for the proposed expansion project is 0.87 µg/m³ with respect to the PM₁₀, 1.17µg/m³ with respect to the SO₂ and 1.39 µg/m³ with respect to the NO_x. R & R is not applicable; as the proposed expansion will be done within the existing plant premises.

Black liquor generated in the pulp section of the plant will be incinerated and processed in CRP for the recovery of soda ash which will be sold to Soap industry. Fly ash from the Boiler will be utilized by nearby brick manufacturers. The secondary clarifier sludge will be subjected to sludge drying beds and then sold to paper board manufactures. Soda ash recovered from CRP is being sold to soap manufacturers. ETP sludge is collected in RCC Platform inside the premises. Out of the total plant area i.e. 4.46 ha, 0.986 ha area is already under greenbelt. Additional 0.72 ha land is acquired adjacent to plant premises for the purpose of green belt plantation.

The unit was commissioned in the year 1993. Thus, the plant is operational on the basis of NOC for the Plant which was issued by UPPCB vide Letter no. 852/NOC/Silvertoan Papers Pvt. Ltd./2719 dated 22nd Jan., 1993.

The Public hearing of the project was held on 14th April, 2015 under the Chairmanship of Additional District Magistrate, district Muzaffarnagar. The issues raised during public hearing were related to employment, Water, air pollution, etc.

The capital cost of the proposed expansion project is Rs. 41.0 crores and the capital cost for environmental protection measures is proposed as Rs. 269.50 lacs. The annual recurring cost towards the environmental protection measures is proposed as Rs. 50 lacs/ annum. The proponent has mentioned that there is no court case to the project or related activity.

Based on the presentation made and discussions held, the Committee recommended the project for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

- i. The project proponent should install 24x7 air and water monitoring devices to monitor air emission and effluent discharge and submit report to Ministry and its Regional Office.
- ii. The Industry should strictly comply with the Charter issued by CPCB for paper and pulp industry located in Ganga basin.
- iii. Compliance to all the specific and general conditions stipulated for the existing plant by the Central/State Government shall be ensured and regular reports submitted to the Ministry and its Regional Office.
- iv. The project authority shall install multi cyclones, wet scrubbers to the boilers to achieve the particulate emission below 50 mg/Nm³. The emissions from chemical recovery section shall be controlled through primary and secondary venturi scrubbers.
- v. In case of treatment process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- vi. The industry shall ensure the compliance of the standards for discharge of the treated effluent from the unit as stipulated under the EPA rules or SPCB whichever is more

- stringent. The company shall make efforts to limit the water consumption upto 15 m³/tonne of product. Adequate steps including use of modern RO/UF based technologies shall be used to increase recycling and reduce water consumption.
- vii. Ground water quality study in and around the project area shall be conducted and report submitted to Ministry's Regional Office, SPCB and CPCB.
 - viii. The company shall submit the comprehensive water management plan along with monitoring plan for the ground water quality and the level, within three months from date of issue of this letter.
 - ix. The project authority shall dispose of hazardous waste as per the provision of Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.
 - x. The company shall develop green belt in 33% of the total land as per the CPCB guidelines to mitigate the effect of fugitive emissions.
 - xi. The water utilization for the plant should not cross the limit of 2700 KLPD.
 - xii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
 - xiii. The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
 - xiv. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the pulp and paper sector shall be strictly implemented.
 - xv. All the commitments made to the public during the Public Hearing/Public Consultation meeting shall be satisfactorily implemented and a separate budget for implementing the same shall be allocated and information submitted to the Ministry's Regional Office.
 - xvi. At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.
 - xvii. In addition to the above provision of ESC, the proponent shall prepare a detailed CSR Plan for the next 5 years including annual physical and financial targets for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Skill Development and infrastructure etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and

revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.

- xviii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

8.4 FURTHER CONSIDERATION

- 8.4.1 Expansion of Tannery Unit capacity of 60 hides/day (raw hide to wet blue leather) to 1000 hides/day (raw hide to finished leather) of **M/s A.K.I India Pvt. Ltd** at Tehsil & Dist. Unnao, UP – [F. No. J-11011/128/2013-IA II (I)]

The matter was earlier considered during the 4th meeting of Expert Appraisal Committee(EAC) (Industry) held on 25th – 26th February, 2016 . The project proponent presented the compliance status for the site visit report during the meeting. Based on the presentation made and discussions held, the Committee was of the opinion that since the proponent is presently discharging the effluent into the drain, the matter should be referred to the CPCB, to ascertain whether a charter has been prepared for tannery units also. The Committee decided that the decision on the project will be taken after receipt of opinion of CPCB.

Based on the observations of the Committee a communication was sent to CPCB. Accordingly, a response was received from the CPCB. It was informed by the CPCB that directions were issued by CPCB to the Tanneries of Kanpur, Banthar (Unnao) and Site – II (Unnao) to comply with the standards issued vide Notification dated 1st January, 2016. The CPCB later vide email dated 12th May, 2016 informed the following:

- i. Standards for CETP were notified vide Notification dated 1st January, 2016
- ii. Directions were issued by CPCB to the Tanneries of Kanpur, Banthar (Unnao) and Site – II (Unnao)
- iii. Draft Notification has been prepared to amend the Environment (Protection) Rules, 1986 by stringent standards.
- iv. Action plan for tannery sector in Ganga basin has been prepared.

The information submitted by the CPCB was examined by the Committee. It was noted that:

- i. Although Directions were issued to the Tannery industries to upgrade their CETPs in UP, however, the present unit is not located in an industrial area and the unit is not connected to the CETP.
- ii. There is no charter prepared for tannery units in the Ganga Basin by the CPCB, as prepared for Pulp and Paper Industry.
- iii. In the Action plan prepared for tannery sector in Ganga basin by CPCB, it has been mentioned that “There are very few operational standalone tanneries in Kanpur and Unnao. UPPCB will be asked to direct these tanneries to join the upgraded CETPs. There are 33 standalone tanneries in Yamuna basin (Haryana and Western U.P.) and 6 standalone tanneries in Muzaffarpur district in Bihar. These tanneries will treat effluent through individual ETPs.

Based on the presentation made and discussions held, the Committee recommended the project for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

- i. The project proponent shall install 24x7 air monitoring devices to monitor air emission, as provided by CPCB and submit report to Ministry and its Regional Office.
- ii. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB should be followed.
- iii. The total fresh water requirement for the plant shall not exceed 511 KLD for the expansion project and permission for water drawl shall be obtained from the Competent Authority.
- iv. The standards notified by the CPCB, from time to time, for the Effluent Treatment Plant for the Tannery units shall be strictly adhered to.
- v. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.
- vi. The Company shall provide stacks of adequate height to the D.G. Sets along with acoustic enclosures for noise control as per CPCB guidelines. The DG Sets shall comply with the norms notified under Environment (Protection) Act, 1986.
- vii. As proposed, green belt of adequate width shall be developed in 33 % of the plant area. Selection of plant species shall be as per the CPCB guidelines in consultation with the DFO.
- viii. At least 5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.
- ix. The proponent shall prepare a detailed CSR Plan for every year for the next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company

- x. Risk and Disaster Management Plan along with the mitigation measures shall be prepared and a copy submitted to the Ministry's Regional Office at Lucknow, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xi. The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xii. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.
- xiii. The project proponent shall provide for LED lights in their offices and residential areas.
- xiv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

8.4.2 Expansion of the existing unit and set up DRI Kiln of 1 x 100 TPD and 4 MW (WHRB) Power Plant Jamuria Industrial Estate, Mondalpur P.O. Nandi, Dt. Burdwan, in the state of West Bengal by **M/s Kunj Bihari Steel Pvt. Ltd [J-11011/107/2016-IA-II(I)]**

The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. For this purpose, the project proponent submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(a), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central level.

M/s. Kunj Bihari Steel Pvt. Ltd proposes expansion of existing Sponge Iron Plant. It has been proposed to set up the plant to manufacture Sponge Iron, based on Direct Reduced Iron (DRI) technology. The unit is located at Jamuria Industrial Estate, Village Mandalpur, Taluka Jamuria, District Burdwan, State West Bengal. The land area acquired for the steel plant was 4.15 Ha out of which 1.37 Ha land will be used for green belt development. Total project cost is approx Rs. 40.54 Crore. Proposed employment generation from proposed project will be 55 direct employments and 100 indirect employment. The proposed capacity for different products for new site area as below:

Name of unit	No. of units	Capacity of each Unit	Production Capacity
DRI Kiln (Existing)	01	100 TPD	30000 TPA Sponge Iron

DRI Kiln (Proposed)	01	100 TPD	30000 TPA Sponge Iron
WHRB (Proposed)	02	4 MW (2 X 2MW)	4 MW Power per day

The electricity load of 4.5 MW will be procured from WHRB (4 MW) and from existing DPS power line (0.5 MW). Company has also proposed to install 1 X 500 KVA DG Set. There is already 1 x 500 KVA DG Set in existence. Proposed raw material and fuel requirement for project are given in the table below. Fuel consumption will be mainly Coal.

Water Consumption for the project after expansion will be 435 M³/day and process waste water generation will be NIL. Only domestic waste water 12 M³ / day which will be used for green belt & water spraying after necessary treatment. No Process Effluent Discharge from Plant. Most of the required water will be available from ADDA water supply line developed for Jamuria Industrial Estate. Permission from ADDA received for 600 KLD. A part of the water requirement will also meeting up from RWH System.

It has been mentioned by the PP that environmental clearance for Jamuria Industrial Estate has been obtained by the Asansol Durgapur Development Authority (ADDA) vide letter No. 21-170 /2006 –IA.III dated 06/11/2006 from the Ministry. It was mentioned that the EIA was prepared for the said Industrial Estate considering total 26 Nos. of Kiln of 11 Industries. Out of the total 26 Nos. Kiln, 2 Kilns was of Kumj Bihari Steels Pvt. Ltd. However, as per OM No. J-11013/36/2014 dated 4th April, 2016 it has been decided by the Committee that the PH has to be conducted for the project.

After detailed deliberations, the Committee recommended the issue of TOR and prescribed following specific TORs, in addition to the standard TOR, for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-2:**

- i. Public Hearing to be conducted by the West Bengal Pollution Control Board.
- ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA.I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

8.4.3 Enhancement of Tissue Paper Production from 25,000 TPA to 55,000 TPA by installation of additional 30,000 TPA Tissue machine without increasing permitted Paper Production of 1,00,000 TPA **by M/s Orient Paper and Industries Limited** (formerly M/s Orient Paper Mills), located in Shadhol District of Madhya Pradesh. (Under Clause 7(ii) of EIA Notification, 2006) [**J-11011/1142/2007-IA II (I)**]

The proposal was considered by the Expert Appraisal Committee (Industry) [EAC(I)] in its 5th EAC on 30th – 31st March, 2016. It was decided that the Regional Office of the Ministry should inspect the project site and a compliance report should be submitted to the Ministry for taking further decision in the matter.

The project proponent submitted the compliance report and made presentation before the Committee.

Based on the presentation made and discussions held, the Committee recommended the project under clause 7(ii) of EIA Notification, 2006 for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

- i. The proponent has to comply with all the conditions of Environmental Clearance granted vide letter No F.No.J-11011/1142/2007-IA-II(I) dated 19th March, 2008.
- ii. The project proponent should install 24x7 air and water monitoring devices to monitor air emission and effluent discharge and submit report to Ministry and its Regional Office.
- iii. The project authority shall install multi cyclones, wet scrubbers to the boilers to achieve the particulate emission below 50 mg/Nm³. The emissions from chemical recovery section shall be controlled through primary and secondary venturi scrubbers.
- iv. In case of treatment process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- v. The industry shall ensure the compliance of the standards for discharge of the treated effluent from the unit as stipulated under the EPA rules or SPCB whichever is more stringent.
- vi. Ground water quality study in and around the project area shall be conducted and report submitted to Ministry's Regional Office, SPCB and CPCB.
- vii. The company shall submit the comprehensive water management plan along with monitoring plan for the ground water quality and the level, within three months from date of issue of this letter.
- viii. The project authority shall dispose of hazardous waste as per the provision of Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.
- ix. The company shall develop green belt in 33% of the total land as per the CPCB guidelines to mitigate the effect of fugitive emissions.
- x. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xi. The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
- xii. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the pulp and paper sector shall be strictly implemented.

- xiii. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

8.5 ANY OTHER ITEM

- 8.5.1 Amendment in EC for use of Fuel-mix (i.e. pet coke, coal, and lignite) in existing Captive Power Plant (15 MW and 33 MW) located at village Rawan, District Baloda bazar-Bhatapara (Chhattisgarh) **M/s Ambuja Cement Limited. [F. No. J-11011/355/2005-IA II (I)]**

The environmental clearance (EC) to the aforesaid project was granted by MoEFCC vide letter No. J-11011/355/2005-IA II (I) dated 13th April 2007. The environment clearance for expansion in clinker production capacity (4.42 Million TPA to 4.80 million TPA) and Captive Power Plant (2x15MW and 33MW) was issued vide letter dated 25th January, 2016.

The proposal M/s Ambuja Cements Ltd regarding use of Fuel Mix (Coal, Petcoke & Lignite) instead of only coal, in existing Captive Power Plant (15 MW & 33 MW) was earlier considered during the 4th meeting of Expert Appraisal Committee held on 25th -26th February, 2016. Based on the presentation made and discussions held, the Committee recommended the proposal for amendment in the Environment Clearance for use of Fuel Mix (Coal, Petcoke & Lignite) instead of only coal, in existing Captive Power Plant (15 MW & 33 MW).

The proposal was further examined in the Ministry and it was decided that the proposal should be referred back to the EAC for further examination as the Ministry is in process of exempting the Cement kilns from the process of requirement for Environmental Clearance for use of pet coke, hazardous waste etc, however, no decision with respect to the use of pet coke in the Captive Power Plant has been taken by the Ministry.

The matter was discussed at length by the Committee. It was explained by the proponent that Pet-Coke can be used in the AFCB and CFB boilers, however for bigger boilers pet-coke is not suitable. The Committee decided that a detailed explanation regarding use of pet-coke in the CPP and the type of boilers in which the pet-coke can be used, should be provided by the proponent. The proposal shall be further considered once the explanation is received.

- 8.5.2 Proposed expansion of Integrated cement project (clinker 4.42 to 7.62 MTPA), Cement (3.5 to 6 MTPA), CPP (63 to 96 MW) and WHRB (12 MW) by installation of line –III of **M/s Ambuja Cements Limited** at village Rawan, Tehsil Balodabazar, District Balodabazar-Bhatpara, Chhattisgarh –Amendment in ToRs and Extension of validity of ToRs **[F. No. J-11011/108/2014-IA.II(I)]**

M/s. Ambuja Cements Limited (Unit: Bhatapara) has proposed for Expansion of Integrated Cement Project - Clinker (4.42 to 7.62 MTPA), Cement (3.5 to 6.0 MTPA), CPP (63 to 96 MW) and WHRB (12MW) by installation of new Line III at Village: Rawan, Tehsil: Balodabazar, District: Balodabazar- Bhatapara (Chhattisgarh).

Application has been submitted for the proposal to MoEFCC, New Delhi on 3rd February, 2014. Subsequently ToR letter for the project was issued vide MoEFCC letter no. J-11011/108/2014-1A-II (I) dated 17th July, 2014.

After issuance of ToR letter for new line - III, ACL had found that the clinker production capacity of existing Line - II could be enhanced from 4.42 MTPA to 4.8 MTPA by process optimization. Therefore, an application for enhancement of clinker production capacity from 4.42 MTPA to 4.8 MTPA was made and Environmental Clearance has been issued by MoEFCC, New Delhi vide letter no. J-11011/355/205-1A-II (I) dated 25th January, 2016.

Now, with grant of EC for expansion in clinker production capacity in existing Line - II; the total clinker production capacity has increased from 4.42 MTPA to 4.8 MTPA. Therefore, ACL is now proposing for amendment in ToR letter no. J-11011/108/2014-1A-II (I) dated 17th July, 2014, granted for installation of new Line - III, regarding change in clinker production capacity as:

S. No.	Particular	As Per ToR Letter dated 17th July, 2014	Proposed Amendment
1.	Clinker Production Capacity (MTPA)	4.42 to 7.62	4.8 to 8.0

In view of the above, the proponent has requested to amend the ToR letter no. J-11011/108/2014-1A-II (I) dated 17th July, 2014 as following:

“Expansion of Integrated Cement Project - Clinker (4.8 to 8.0 MTPA), Cement (3.5 to 6.0 MTPA), CPP (63 to 96 MW) and WHRB (12 MW) by installation of new Line III at Village: Rawan, Tehsil: Balodabazar, District: Balodabazar - Bhatapara (Chhattisgarh)”.

The proponent further mentioned that the validity of the ToR dated 17th July, 2014 is up to 2 years, as mentioned in the ToR letter. Therefore the proponent has requested to extend the validity of ToR for another year upto 16th July, 2017.

After detailed deliberation the Committee recommended the proposal for amendment in the ToRs as mentioned in table above. Regarding extension of validity of ToR the Committee noted that the Ministry vide OM dated 8th October, 2014 and 7th November, 2014 extended the validity period of ToRs for a period of 3 years, which is extendable for a period of 1 year, if required. Therefore the ToR letter granted to the PP on 17th July, 2014 is already valid for a period upto 16th July, 2017.

8.5.3 Enhancement in production capacity of Integrated Cement Project[Clinker (2.0MTPA to 4.5 MTPA), Cement (2.5MTPA to 5.2 MTPA) and WHRS (10 MW to 12 MW) by **M/s. UltraTech Cement Ltd.** located at Village(s) Tonki, Temarni, Sondul and Golpura, Tehsil-Manawar, District- Dhar, Madhya Pradesh-Amendment in ToRs **[J-11011/86/2012-IA.II(I)]**

M/s. UltraTech Cement Limited has proposed for Enhancement in Production Capacity of Integrated Cement Project - Clinker (2.0 to 4.5 MTPA), Cement (2.5 to 5.2 MTPA), Captive Power Plant (40 MW), WHRB (2 x 6 MW) at Villages - Tonki, Temarni, Sondul & Golpura, Tehsil - Manawar, District - Dhar (Madhya Pradesh).

Project was considered before EAC (Industry - I) in its 5th Meeting on 31st March, 2016 and subsequently, ToR was issued by MoEFCC, New Delhi vide letter no. J-11011/86/2012-IA.II (I) dated 24th May, 2016.

After technical discussions, UltraTech Cement Limited (UTCL) now wants to change the configuration of kiln as per the best available technology. Hence, UTCL is now proposing for amendment in the ToR issued for the project:

S. No.	Particular	As per ToR Letter dated 24 th May, 2016	Proposed Amendment in ToR
1.	Clinker Production Capacity	2.0 to 4.5 MTPA	2.0 to 6.0 MTPA
2.	WHRS	10 to 12 MW	10 to 16 MW

In view of the above, the proponent has requested to amend the ToR letter no. J-11011/86/2012-IA.II (I) dated 24th May, 2016 as following:

“Enhancement in production capacity of Integrated Cement Project - Clinker (2.0 to 6.0 MTPA), Cement (2.5 to 5.2 MTPA), CPP (40 MW), WHRS (10 to 16 MW) and D.G. Set (2 x 6 MW) at Villages - Tonki, Temarni, Sondul & Golpura, Tehsil - Manawar, District - Dhar (Madhya Pradesh)”.

After detailed deliberation the Committee recommended the proposal for amendment in the ToRs as mentioned in table above.

8.6 CASE FOR TERMS OF REFERENCE (TOR)

8.6.1 Proposed Enhancement in Clinker Production Capacity (8.4 MTPA to 8.9 MTPA) by Process Optimization Located at Village: Sawa-Shambupura, Tehsil & District: Chittorgarh (Rajasthan) by **M/s. UltraTech Cement Ltd.** (Unit: Aditya Cement Works) [F.No- J-11011/405/2011-IA-II(I)]

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (J.M. EnviroNet Pvt. Ltd) gave a detailed presentation on the salient features of the project. The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. The project proponent has submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(b), under category ‘A’ of the Schedule of EIA Notification, 2006 and appraised at the Central level.

M/s. Ultratech Cement Ltd. (Unit: Aditya Cement Works) has an existing Integrated Cement Plant (Line - I, II & III) having total Clinker production capacity of 8.4 MTPA, Cement 8.0 MTPA, Captive Power Plant 73 MW, WHRB 16.05 MW and DG Set 12 MW at Village Sawa-Shambupura, Tehsil & District Chittorgarh (Rajasthan).

Environmental clearance for existing capacities was issued by MoEFCC, New Delhi, vide their letter no. J-11011/980/2008 dated 25th August, 2009 (6.4 MTPA clinker) and J-11011/405/2011-IA-II (I) dated 26th February, 2013 (2.0 MTPA clinker), respectively. Ultratech Cement Ltd. is now proposing for only 6% enhancement in clinker production capacity from 8.4 MTPA to 8.9 MTPA by Process Optimization in existing Line - III under Section 7(ii) of EIA Notification, dated 14.06.2006.

The existing and proposed enhancement capacity are as follows:

S. No.	Units	Line	Existing Capacity	Additional Capacity	Total Capacity after Enhancement
1.	Clinker (MTPA)	Line - I	2.2	No Change	2.2
		Line - II	4.2	No Change	4.2
		Line - III	2.0	0.5	2.5
		Total	8.4	0.5	8.9
2.	Cement (MTPA)	Line - I, II & III	8.0	No Change	8.0
3.	CPP (MW)	Line - I, II & III	73 (1 x 23 and 2 x 25)	No Change	73 (1 x 23 and 2 x 25)
4.	WHRS (MW)	Line - I, II & III	16.05	No Change	16.05
5.	D.G. Set (MW)	Line - I, II & III	12.0 (2 x 6)	No Change	12.0 (2 x 6)

The total existing plant area is 250.55 ha; proposed enhancement will be done within the existing premises by process optimization. No additional water, manpower, cost, storage area is required. The proposed enhancement will be done by internal modifications. No National Park, Wildlife Sanctuary, Biosphere Reserve exist within 10 km radius of plant site. The targeted production capacity of the Clinker is 8.9 MTPA. The raw material and fuel requirement for the proposed enhancement is given below:

S. No.	Raw Material	Requirement (MTPA)			Source
		Existing (Line - I, II & III)	Additional (Line - III)	Total after proposed enhancement	
1	Limestone	11.58	0.69	12.27	Own Captive Mine
2	Additive (Red Ochre / Laterite)	0.885	0.526	1.411	Sawa-Rajasthan
3	Coal (Indigenous/ Imported), Petcoke	0.919	0.055	0.974	SECL Reliance, Essar IOCL, & Others

All major sources of air pollution are being provided with Bag Houses / Bag filters, ESPs to maintain the PM emission level below permissible limit. Ambient air quality and stack emission will be regularly monitored to ensure that ambient air quality standards are being met all the time. Domestic wastewater generated from plant & colony will be treated in STP and treated water will be utilized in greenbelt development. Rain water harvesting structures will be installed within the plant and colony premises. Out of the total plant area (250.55 ha), 95.76 ha i.e. 38% of the total plant area has already been developed under greenbelt / plantation.

Based on the presentation made and discussions held the Committee recommended the project for environment clearance under clause 7(ii) of EIA Notification, 2006 subject to stipulation of the following additional specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

- i. The Project Proponent shall comply with all specific and general conditions stipulated earlier to the project vide Environment Clearance letter No. J-11011/980/2008 dated 25th August, 2009 and J-11011/405/2011-IA-II (I) dated 26th February, 2013
- ii. The project proponent should install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.
- iii. The project proponent shall provide for LED lights in their offices and residential areas.
- iv. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.
- v. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.

8.6.2 Application for grant of ToR for expansion of Sponge Iron plant to Mini Steel Plant by **M/s Maa Chhinnmastika Cement & Ispat Pvt. Ltd.** located at village Hehal, P.o - Barkakhana, Dist.- Ramgrah, Jharkhand. [F. No. J-11011/215/2016-IA.II(I)]

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (M/s Visiontek Consultancy Services Pvt. Ltd.) gave a detailed presentation on the salient features of the project. The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. The project proponent has submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(a), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central level.

M/s. Maa Chhinnmastika Cement & Ispat Pvt. Limited proposes to install a new manufacturing unit for M. S. Billets, Rolled Products and Captive Power within premises of Existing Sponge Iron Unit (300 TPD). It is proposed to set up the plant for Addition – (i) Steel Melting Shop (Induction Furnaces and Billet Caster) – 2 x12 T (240 TPD); (ii) Rolling Mill (TMT Rebar Mill) – 14 Stand Mill (225 TPD); (iii) Power Plant (WHRB – 6 MW + AFBC – 9) – 15 MW; (iv) Iron Ore Crushing & Beneficiation Plant – 80 TPH Single Stream (670 TPD) and (v) Crushing unit (SMS Slag) -5 TPH (40 TPD) based on latest technology. The proposed unit will be located at Village: Hehal, Taluka: Ramgarh, District: Ramgarh, State: Jharkhand. The land area acquired for the integrated steel plant is 30.692 acres out of which 10.779 acres land will be used for green belt development. Total project cost is approx Rs. 191.20 Crores. Proposed employment generation from proposed project will be 491 direct employments and 1227 indirect employment.

The proposed capacity for different products for site area as below:

S. No	Name of unit	No. of units	Capacity of Each Unit	Production Capacity
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1	Sponge Iron (DRI) Existing	3	100	300 TPD~ 90000 TPA
2	Proposed – Expansion (Addition)			
3	CPP (WHRB + AFBC)	WHRB - 3 x 2MW AFBC - 1 x 9MW	6 MW 9 MW	Power ~ 15 MW
4	SMS - IF & Billet Caster	2	12	240 TPD ~ 72000 TPA
5	Rolling Mill –	1	14 Strand Mill	225 TPD ~ 67500 TPA
6	Iron Ore Crushing & Beneficiation Plant	1	80 – 100 TPH Single Stream	670 TPD ~ 201000 TPA Throughput
7	Slag Crushing Plant for SMS Slag	1	5 TPH	40 TPD ~ 12000 TPA

The electricity load is procured from Existing 950 KVA, source is JSEB and after Expansion – 15 MW will be procured from Captive Power Plant. Company has also installed 1 x1010 KVA 1 x 500 KVA & 1 x 320 KVA DG Sets.

Proposed raw material and fuel requirement for project are Iron ore 670 TPD, Coal 630 TPD, Dolomite 7.67 TPD, Scrap 66 TPD. Requirement would be fulfilled by existing operating mines, e-auction, linkage as well as in-house. Fuel consumption will be mainly Coal.

Water Consumption for the proposed project is 247 m³/day for the existing plant and 2088 m³ for the proposed plant. The total water requirement will be 2335 m³/day which will be sourced from River Damodar and waste water generation will be recycled/reused within premises for dust suppression, horticulture etc. Domestic waste water will be routed to septic tank – soak pit combination.

After detailed deliberations, the Committee recommended the issue of TOR and prescribed following specific TORs, in addition to the standard TOR, for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-2:**

- i. Public Hearing to be conducted by the Jharkhand Pollution Control Board.
 - ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
 - iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA.I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.
- 8.6.3 Expansion of existing plant by installation of Sponge Iron Plant (1x350 TPD Kiln), Incon Furnces (4x15 T), 180000 TPA capacity Rolling Mill, Continuous Galvanising Line (120000 TPA) along with 12 MW capacity Captive Power Plant (8 MW WHRB + 4MW AFBC) in the existing steel plant by **M/s BRGD Ingot Pvt. Ltd.** at village

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (M/s Envirotech East Pvt. Ltd., Kolkata) gave a detailed presentation on the salient features of the project. The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. The project proponent has submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(a), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central level.

M/s BRGD Ingot Private Limited is presently operating Induction Furnaces (2x7 T + 1x10 T) for production of 80,400 TPA Billets at village Palitpur, P.O. & Mouza Mirzapur, P.S. & District Burdwan in West Bengal. Another 1x15 T Induction Furnace is under construction. Its geographical coordinates are Latitude 23°17'14.62"N and Longitude 87°51'44.21"E with mean sea level as 110 ft.

The company now proposes to expand its existing manufacturing activities through setting up of Sponge Iron Plant (1x350 TPD Kiln), Induction Furnaces (4x15 T), 1,80,000 TPA capacity Rolling Mill, Continuous Galvanising Line (1,20,000 TPA) along with Captive Power Plant of 12 MW capacity in the existing steel plant. The existing as well as proposed units along with their capacities are presented below:

EXISTING PROJECT

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Induction Furnaces	3	(2x7 T + 1x10 T) IFs	80,400 TPA Billet
Induction Furnace (Under Construction)	1	(1x15 T) IF	60,000 TPA Billet

PROPOSED PROJECT

Name of unit	No. of units	Capacity of each Unit	Production Capacity
Sponge Iron Plant	1	1x350 TPD Kiln	1,15,500 TPA Sponge Iron
Induction Furnaces	4	(4x15 T) IFs	1,98,000 TPA Billet
Rolling Mill	1	1,80,000 TPA	1,80,000 TPA TMT Bars, Strips & Structural
Continuous Galvanising Line	1	1,20,000 TPA	1,20,000 TPA Strips & Structural
Captive Power Plant	1	8 MW WHRB based & 4 MW AFBC based	12 MW

The proposed project will be installed within the existing plant premises, occupying total 21 acres of land, out of which 6.93 acres land will be used for green belt development. Total project

cost is approx 130 Crore rupees. Proposed employment generation from proposed project will be 400 (direct employment).

The electricity load of 52 MW required for the proposed project will be sourced from DVC supply system as well as proposed 12 MW CPP. Proposed raw material and fuel requirement for project are pellet, imported coal, dolomite, ferro alloys, scraps, pig iron etc. Most of the Raw materials will be fulfilled from local market. However, Coal will be imported from South Africa. Coal consumption will be mainly for Sponge Iron Plant & Captive power plant.

As per an initial estimate, water to the tune of 394 cu.m/day will be required for the proposed project. The raw water will be sourced from Bore wells. The plant will be designed as a zero discharge plant. The water will be recirculated through cooling and treatment. The entire wastewater will be recycled for various purposes inside the plant. Domestic wastewater will be treated in Septic tank - Soak pit system.

After detailed deliberations, the Committee recommended the issue of TOR and prescribed following specific TORs, in addition to the standard TOR, for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-2:**

- i. Photographs of existing plant should be presented. A clear view for the inside of the plant as well as outside of the plant should be presented
- ii. Public Hearing to be conducted by the West Bengal Pollution Control Board.
- iii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- iv. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA.I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

8.6.4 Expansion of Integrated Steel Plant; MS Billet (from 216000 MTPA to 330000 MTPA), Captive Power (from 24 MW to 53 MW) and Sponge Iron (from 198000 MTPA to 297000 MTPA) at Plot No. : AL – 5, Sector -23, GIDA Industrial Area, Sahjanwa, District –Gorakhpur Uttar Pradesh of **M/s Gallant Ispat Ltd. [F. No. J-11011/229/2008-IA.II(I)]**

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant gave a detailed presentation on the salient features of the project. The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. The project proponent has submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(a), under category ‘A’ of the Schedule of EIA Notification, 2006 and appraised at the Central level.

M/s. Gallant Ispat Limited, Sahjanwa Gorakhpur proposes expansion of existing manufacturing unit for Integrated Steel Plant. The existing unit is located at Village Sahjanwa and Domharmaphi, Taluka Sahjanwa, District Gorakhpur, Uttar Pradesh. The land area acquired for the existing integrated steel plant is 40.50 Ha out of which 14.17 Ha land is used for green belt

development. No additional land is required for proposed expansion. Total project cost is approx 201.93 Crore rupees. For proposed expansion additional 140 persons will be required. Total employment after proposed expansion of the project will be 396 direct employments and 500 indirect employments. The proposed capacity for different products for new site area as below:

S. No	Particulars	Existing	Proposed expansion	Total Capacity (after expansion)	
1	Sponge Iron	198000 MTPA	99000 MTPA	297000 MTPA (2 X 450 TPD X 330 days)	
2	M. S. Billets via induction Furnace & Caster Machine Route	216000 MTPA	114000 MTPA	330000 MTPA	
3	Captive Power Plant	CAPTIVE POWER PLANT			
		Particulars	Existing	Proposed expansion	Total Capacity
		WHRB Boiler	8 MW	10 MW	18 MW
		CFBC Boiler	16 MW	19 MW	35 MW
		CAPACITY AFTER PROPOSED EXPANSION			53 MW

The electricity load of plant at existing capacity is 24 MW and after proposed expansion 45 – 50 MW will be met from in house capacity and Auxiliary load backup will be met by 04 No of existing DG set of Capacity (1250,1000,630 and 380 KVA) and 02 No of new DG set 1250 KVA.

Water Consumption for the project at existing capacity is 1700 KLD and after the proposed expansion total requirement will be 3240 KLD and waste water generation will be Zero. Domestic waste water is being treated in Septic tank and Soak pit and industrial waste water generated is being neutralize in pond and 100 % recycling is being achieved at existing capacity and same management plan will be followed after expansion also.

After detailed deliberations, the Committee recommended the issue of TOR and prescribed following specific TORs, in addition to the standard TOR, for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-2:**

- i. Power utilization statement and comparison for the existing and the proposed units should be submitted
- ii. Public Hearing to be conducted by the Uttar Pradesh Pollution Control Board.
- iii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- iv. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA.I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

- 8.6.5 Expansion of Steel Plant at R.G. Peta & Srirampuram Villages, L. Kota Mandal, Vizianagaram Distreict, Andhra Pradesh of **M/s MAA Mahamaya Industries Ltd. [F. No. J-11011/50/2005-IA.II(I)]**

Consideration of the proposal was deferred on the request of the Project Proponent.

- 8.6.6 Establishment of Industrial unit consisting of sponge iron (1000 TPD), Pellet plant (1500 TPD), MS Ingots/Billets (1000 TPD), structural TMT bar (1000 TPD) along with power generation (50 MW) of **M/s Kapila Metals Pvt. Ltd.** at B-102 to 105, Addl. MIDC Area, Phase III, Jalna, District Jalna, Maharashtra. **[F. No. J-11011/144/2014-IA.II(I)]**

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (M/s Ultra - Tech) gave a detailed presentation on the salient features of the project. The proposed project of M/s Kapila Metals Pvt. Ltd. (KMPL) at Additional MIDC, Phase –III, Plot No: B-102 to 105, , Dist : Jalna, Maharashtra was initially received in the Ministry on 29th EAC meeting dated 11th-12th December 2014 for obtaining Terms of Reference (TOR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its meeting held on 11th – 12th December 2014 and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry of Environment and Forests had prescribed TORs to the project on 1st April 2015.

Based on the TORs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 27th May 2016.

While appraising the proposal the Committee is of the opinion that the consultant has prepared an EIA/EMP report in which various inconsistencies were noted. The layout plan was not to the scale and there is no provision of parking for the vehicles in the layout plan. The internal circulation roads were also not oriented properly.

The green belt suggested in the EIA report is also on adhoc basis, which should be planed as per the guidelines of CPCB. The effluent discharge standards were also incorrect. The water balance statement and the air quality data and the analysis is also vague.

The Committee after detailed deliberation advised the proponent and the consultant to revisit the EIA/EMP report for its correctness in terms of data analysis, predictions and the final conclusion.

28th June, 2016 /Tuesday (Sutlej)

8.7 ENVIRONMENTAL CLEARANCE (EC)

- 8.7.1 Proposed 39.000 TPA plant for manufacturing of Manganese Oxide, Manganese di Oxide, Zinc Suphide, Manganese Suphate at Plot No.B-1, Saoner Industrial Area. Tal-Saoner. Distt. Nagpur by **M/s Goodearth Agrochem Pvt. Ltd. – [F. No. J-11011/39/2015-IA II (I)]**

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant (M/s Pollution and Ecology Control Services (PECS), Nagpur) gave a detailed presentation on the salient features of the project. The proposed project of M/s Goodearth Agrochem Pvt. Ltd. is located at Plot no.B-1, Saoner Growth Center, MIDC, Village

Hetisurla, Tehsil-Saoner, Nagpur was initially received in the Ministry on 09/12/2014 for obtaining Terms of Reference (TOR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its 37th meeting held on 30th April to 1st May 2015 and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry of Environment and Forests had prescribed TORs to the project on 16th March 2016. Based on the TORs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 26/04/2016.

The project of M/s Goodearth Agrochem Pvt. Ltd. located at Plot no.B-1, Saoner Growth Center, MIDC, Village Hetisurla, Tehsil-Saoner, Nagpur is for setting up of a new unit for production of Manganese Oxide, Manganese Dioxide & Manganese Sulphate. The TOR was granted for manufacturing of MnO, MnO₂, MnSO₄, ZnO, ZnSO₄. The proponent is withdrawing the proposal of manufacturing of ZnO (Zinc Oxide) and ZnSO₄ (Zinc Sulphate) at this stage due to non availability of good process consultant in this region to establish manufacturing process. M/s Goodearth Agrochem Pvt. Ltd shall approach Ministry of Environment, Forest and Climate Change in future after finalization of Process Consultant.

The total land required for the project is 2.01 ha which is in Industrial area. No forestland involved. It has been reported that no water body exist around the project. No national park/wildlife sanctuary/biosphere reserve/tiger reserve/elephant reserve etc. are reported to be located in the core and buffer zone of the project.

The production capacity of Manganese Oxide is 18000 MTPA, Manganese Dioxide is 6000 MTPA, Manganese Sulphate is 9000 MTPA. The ore for the plant would be procured from MOIL and imported. The ore transportation will be done through road. The topography of the area is flat and reported to lie between 21°24'28.35"N to 21°24'22.85"N Latitude and 78°52'11.41"E to 78°52'9.60"E Longitude in Survey of India topo sheet No.55K/15, at an elevation of 345 mts MSL. Following table presents the details of the products:

Product	Production per Annum in MTs
Manganese Oxide(Industrial Grade)	18000
Manganese Oxide(Feed Grade)	
Manganese Dioxide(Industrial Grade)	6000
Manganese Dioxide(Water filtrationGrade)	
Manganese Sulphate	9000

The water requirement of the project is 36 m³/day, out of which 30 m³/day of fresh water requirement will be obtained from MIDC and the remaining requirement of 6 m³/day will be recycled. The power requirement of the project is 400 KVA which will be obtained from State Electricity Board.

Ambient air quality monitoring has been carried out at 8 locations during 07th March 2015 to 07th June 2015 and the data submitted indicated PM₁₀ (43.4 to 60.0 µg/m³), PM_{2.5} (28.3 to 31.4 µg/m³), SO₂ (10.9 to 25.0 µg/m³) and NO_x (12.8 to 28.2 µg/m³). The results of the modeling study indicates that the maximum increase of GLC for the proposed project is 1.64 µg/m³ with respect to PM₁₀, 8.76 µg/m³ with respect to SO₂ and 10.14 µg/m³ with respect to NO_x.

The major solid waste generated will be the discarded cake from the filter press @ 9 to 10% of MnSO₄ production. The solid waste generated will send to CHWTDF and brick manufacturing. The Fly ash generated will be 150 TPM. Solid waste is non hazardous and non-toxic in nature. Fly ash generated will be sold to brick manufacturers.

The capital cost of the project is Rs5.00 Crores and the capital cost for environmental protection measures is proposed as Rs 56.0 Lacs. The annual recurring cost towards the environmental protection measures is proposed as Rs 32 – 35 Lakh. The proponent has mentioned that there is no court case to the project or related activity.

Based on the presentation made and discussions held, the Committee recommended the project for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

- i. The project proponent should install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.
- ii. Continuous stack monitoring facilities for all the stacks shall be provided and sufficient air pollution control devices viz. Electrostatic precipitator (ESP), bag house, bag filters etc. shall be provided to keep the emission levels below 50 mg/Nm³ and installing energy efficient technology.
- iii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- iv. Gaseous emission levels including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry vide G.S.R. 414(E) dated 30th May, 2008 and regularly monitored. Guidelines / Code of Practice issued by the CPCB shall be followed.
- v. Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.
- vi. 'Zero' effluent discharge shall be strictly followed and no wastewater shall be discharged outside the premises.
- vii. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act whichever are more stringent.
- viii. Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Ministry's Regional Office, SPCB and CPCB.

- ix. A time bound action plan shall be submitted to reduce solid waste generated due to the project related activity, its proper utilization and disposal.
- x. A Risk and Disaster Management Plan shall be prepared and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xi. The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.
- xii. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.
- xiii. The project proponent shall provide for LED lights in their offices and residential areas.
- xiv. At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.
- xv. The proponent shall prepare a detailed CSR Plan for every year for the next 5 years for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Health, Skill Development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
- xvi. The Company shall submit within three months their policy towards Corporate Environment Responsibility which shall inter-alia address (i) Standard operating process/procedure to bring into focus any infringement/deviation/ violation of environmental or forest norms/conditions, (ii) Hierarchical system or Administrative order of the Company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.

- xvii. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.
- xviii. The project proponent shall provide for LED lights in their offices and residential areas.
- xix. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

8.7.2 Enhancement of Clinker Production from 1.6 MTPA to 2.60 MTPA (By Installation of New Line) Cement from 0.9 MTPA to 2.0 MTPA by **M/s Nagarjuna Cement Plant (NCL)** at Village Mattapalli, Mattampalli Mandal, Nalgonda District, Telangana. **[F. No. J-11011/576/2008-IA.II(I)]**

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant gave a detailed presentation on the salient features of the project. The application of M/s NCL Industries Ltd., (NCL) was initially received in the Ministry on 12th May, 2015 for obtaining Terms of Reference (TOR) as per EIA Notification, 2006. The project was appraised by the Expert Appraisal Committee (Industry) [EAC(I)] during its meeting held on 12.08.2015 and prescribed TORs to the project for undertaking detailed EIA study for the purpose of obtaining environmental clearance. Accordingly, the Ministry of Environment and Forests had prescribed TORs to the project on 24.09.2015. Based on the TORs prescribed to the project, the project proponent submitted an application for environmental clearance to the Ministry online on 28.05.2016

The project of M/s NCL Industries Ltd., (NCL) located in Mattapalli Village, Mattampalli Tehsil, Nalgonda District, is for increasing the Clinker production capacity of the cement plant from 1.60 to 2.60 MTPA and Cement Production from 0.9 to 2.0 MTPA by installation of new Line i.e. Line – III of 1.0 MTPA Clinker and 1.1 MTPA Cement production capacity.

The cement plant is existing in an area of 48.12 ha owned by NCL. No /forestland involved. The entire land has been acquired by them. No River passes through the project area. It has been reported that no water body/water body exist around the project and modification/diversion in the existing natural drainage pattern at any stage has not been proposed.

The topography of the area is flat and reported to lies between 16°42'43.34" & 16°43'24.49"N (Latitude) and 79°48'55.94"E - 79°49'17.62"E (Longitude) in Survey of India Toposheet No. 56/P/14 , at an elevation of 80 m AMSL. The ground water table reported to ranges between 30-35 below the land surface during the post-monsoon season and 35-40 below the land surface during the pre-monsoon season. no ground water will be drawn for the project

There are no wild life sanctuaries, national parks, elephant/tiger reserves within 10km radius of the study area. The targetted production capacity of the cement plant is 2.6 million TPA of clinker and 2.0 MTPA of cement. The limestone for the plant would be procured from the Captive mines. The limestone transportation will be done through trucks.

The water requirement of the project is estimated as 4100 m³/day, NCL has obtained permission from the Irrigation & C.A.D Department, Government of Andhra Pradesh for the drawl of 4275 m³/day from River Krishna. The power requirement of the project is estimated as 18 MW, total power requirement for the NCL cement plant complex is presently met from Grid.

Ambient air quality monitoring has been carried out at 8 locations during Post Monsoon Season – 2015, covering the months of October, November and December 2015 and the data submitted indicated: PM₁₀ (45.7 – 66.3 µg/m³), PM_{2.5} (18.5 – 28.9 µg/m³), SO₂ (9.1 – 12.9 µg/m³) and NO_x (10.3 – 13.9 µg/m³). The results of the modeling study indicates that the maximum increase of GLC for the proposed project is 1.85 µg/m³ with respect to the PM₁₀, 7.39 µg/m³ with respect to the SO₂, and 7.51 µg/m³ with respect to the NO_x.

It has been reported that there are no people in the core zone of the project. No/ R&R is involved. It has been envisaged that no families to be rehabilitated, which will be provided compensation and preference in the employment.

There is no waste generation from the project. Flyash generated from the proposed power plant for which Environmental clearance was obtained will be utilized for Cement production. 16.0 ha was developed as green belt within the project site to attenuate the noise levels and trap the dust generated due to the project development activities.

The Public hearing of the project was held on 04/05/2016 for proposed expansion of Cement Plant to 2.6 MTPA clinker production and 2.0 MTPA cement production. No specific issues were raised during public hearing.

The capital cost of the project is Rs. 200 Crores and the capital cost for environmental protection measures is proposed as Rs.15.25 The annual recurring cost towards the environmental protection measures is proposed as Rs. 2.5 Crores. The proponent has mentioned that there is no court case to the project or related activity.

Based on the presentation made and discussions held the Committee recommended the project for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

- i. The project proponent should install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.
- ii. The Standards issued by the Ministry vide G.S.R. No. 612 (E) dated 25th August, 2014 and subsequent amendment dated 9th May, 2016 and 10th May, 2016 regarding cement plants with respect to particulate matter, SO₂ and NO_x shall be followed.
- iii. Continuous stack monitoring facilities to monitor gaseous emissions from the process stacks shall be provided. After expansion, limit of PM shall be controlled to meet prescribed standards by installing adequate air pollution control viz Electrostatic precipitators to clinker cooler, bag house to raw mill/kiln and bag filters to coal mill and cement mill. Low NO_x burners shall be provided to control NO_x emissions. Regular calibration of the instruments must be ensured.

- iv. Efforts shall be made to achieve power consumption of 70 units/tonne for Portland Pozzolona Cement (PPC) and 95 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- v. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- vi. AAQ Modelling shall be carried out based on the specific mitigative measures taken in the existing project and proposed for the expansion project to keep the emissions well below prescribed standards.
- vii. Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines/Code of Practice issued by the CPCB in this regard shall be followed.
- viii. A statement on carbon budgeting including the quantum of equivalent CO₂ being emitted by the existing plant operations, the amount of carbon sequestered annually by the existing green belt and the proposed green belt and the quantum of equivalent CO₂ that will be emitted due to the proposed expansion shall be prepared by the project proponent and submitted to the Ministry and the Regional Office of the Ministry. This shall be prepared every year by the project proponent. The first such budget shall be prepared within a period of 6 months and subsequently it should be prepared every year.
- ix. For the employees working in high temperature zones falling in the plant operation areas, the total shift duration would be 4 hrs or less per day where the temperature is more than 50°C. Moreover, the jobs of these employees will be alternated in such a way that no employee is subjected to working in high temperature area for more than 1 hr continuously. Such employees would be invariably provided with proper protective equipments, garments and gears such as head gear, clothing, gloves, eye protection etc. There should also be an arrangement for sufficient drinking water at site to prevent dehydration etc
- x. Arsenic and Mercury shall be monitored in emissions, ambient air and water.
- xi. The coal yard shall be lined and covered.
- xii. The project proponent shall prepare a report on impact of project on surrounding reserve forests within six months and will get it approved from the State Forest Department. A copy of the same should be submitted to the Ministry and its Regional Office.
- xiii. The project proponent shall take all precautionary measures for conservation and protection of wild fauna found in the study area. A Wildlife Conservation Plan specific to this project site shall be prepared in consultation with the State Forest and Wildlife Department. A copy of the Conservation plan shall be submitted to the Ministry and its Regional Office.

- xiv. The project proponent will also provide the latest status of the environmental compliances in respect of its existing plant.
- xv. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of conveyors/rail mode of transport wherever feasible. The company shall have separate truck parking area. Vehicular emissions shall be regularly monitored.
- xvi. Efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge shall be adopted.
- xvii. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.
- xviii. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986.
- xix. All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers / re-processors only.
- xx. The kiln shall be provided with a flexible fuel feeding system to enable use of hazardous wastes and other wastes including biomass, etc.
- xxi. The proponent shall examine and prepare a plan for utilisation of high calorific wastes such as chemical wastes, distillation residues, refuse derived fuels, etc as alternate fuels based on availability and composition. For this, the proponent shall identify suitable industries with such wastes and enter into an MOU for long-term utilisation of such wastes as per the Environment (Protection) Rules, 1986 and with necessary approvals.
- xxii. Efforts shall be made to use the high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly. The PP shall enter into an MOU with units with potential for generating hazardous waste and in accordance with Hazardous Waste Regulations and prior approval of the MPPCB.
- xxiii. Green belt over 33% of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area and along road sides etc. by planting native and broad leaved species in consultation with local DFO, local community and as per the CPCB guidelines.
- xxiv. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.

- xxv. The project proponent shall provide for LED lights in their offices and residential areas.
- xxvi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.
- xxvii. At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.
- xxviii. In addition to the above provision of ESC, the proponent shall prepare a detailed CSR Plan for the next 5 years including annual physical and financial targets for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Skill Development and infrastructure etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2% retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.
- xxix. A Risk Assessment Study and Disaster Preparedness and Management Plan along with the mitigation measures shall be prepared with a focus of Disaster Prevention and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xxx. To educate the workers, all the work places where dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.
- xxxi. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

8.8 FURTHER CONSIDERATION

8.8.1 Expansion of existing clinker and cement manufacturing capacity of **M/s J.K. Cement Works** (2.90 N4MTPA to 5.65 N4MTPA of Clinker Production and 3.45 MMTPA to 7.05 MMTPA of cement Production) and installation of an additional Coal based Captive Power Plant of 35 MW and a Waste Heat Recovery Boiler of 10 MW, at Village - Mangrol, Tehsil-Nimbahera, Distt. - Chittorgarh (Raj.)**[J-11011/267/2013-IA-II (I)]**

The proposal was earlier considered during the 4th meeting of Expert Appraisal Committee held on 26/02/2016, when the Committee had desired additional information on the following for further consideration of the proposal:

- i. Arial photographs, from an elevated building or tower should be taken for the entire site and submitted.
- ii. Compliance report from the Regional Office of the MoEFCC should be submitted

The above information has been submitted to MOEF&CC on 21/05/2016. The same has been forwarded to the Chairman/members of the Expert Appraisal Committee

The information is submitted vide letter No MGR-PC-10(C)/1136 dated 15th June, 2016

Based on the presentation made and discussions held, the Committee recommended the project for environment clearance subject to stipulation of the following specific conditions and any other mitigative measures, as prescribed by the Ministry for environmental protection:

- i. The project proponent should install 24x7 air monitoring devices to monitor air emissions, as provided by the CPCB and submit report to Ministry and its Regional Office.
- ii. The Standards issued by the Ministry vide G.S.R. No. 612 (E) dated 25th August, 2014 and subsequent amendment dated 9th May, 2016 and 10th May, 2016 regarding cement plants with respect to particulate matter, SO₂ and NO_x shall be followed.
- iii. Continuous stack monitoring facilities to monitor gaseous emissions from the process stacks shall be provided. After expansion, limit of PM shall be controlled to meet prescribed standards by installing adequate air pollution control viz Electrostatic precipitators to clinker cooler, bag house to raw mill/kiln and bag filters to coal mill and cement mill. Low NO_x burners shall be provided to control NO_x emissions. Regular calibration of the instruments must be ensured.
- iv. Efforts shall be made to achieve power consumption of 70 units/tonne for Portland Pozzolona Cement (PPC) and 95 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.
- v. The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- vi. AAQ Modelling shall be carried out based on the specific mitigative measures taken in the existing project and proposed for the expansion project to keep the emissions well below prescribed standards.
- vii. Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines/Code of Practice issued by the CPCB in this regard shall be followed.
- viii. A statement on carbon budgeting including the quantum of equivalent CO₂ being emitted by the existing plant operations, the amount of carbon sequestered annually by the

existing green belt and the proposed green belt and the quantum of equivalent CO₂ that will be emitted due to the proposed expansion shall be prepared by the project proponent and submitted to the Ministry and the Regional Office of the Ministry. This shall be prepared every year by the project proponent. The first such budget shall be prepared within a period of 6 months and subsequently it should be prepared every year.

- ix. For the employees working in high temperature zones falling in the plant operation areas, the total shift duration would be 4 hrs or less per day where the temperature is more than 50°C. Moreover, the jobs of these employees will be alternated in such a way that no employee is subjected to working in high temperature area for more than 1 hr continuously. Such employees would be invariably provided with proper protective equipments, garments and gears such as head gear, clothing, gloves, eye protection etc. There should also be an arrangement for sufficient drinking water at site to prevent dehydration etc
- x. Arsenic and Mercury shall be monitored in emissions, ambient air and water.
- xi. The coal yard shall be lined and covered.
- xii. The project proponent shall prepare a report on impact of project on surrounding reserve forests within six months and will get it approved from the State Forest Department. A copy of the same should be submitted to the Ministry and its Regional Office.
- xiii. The project proponent shall take all precautionary measures for conservation and protection of wild fauna found in the study area. A Wildlife Conservation Plan specific to this project site shall be prepared in consultation with the State Forest and Wildlife Department. A copy of the Conservation plan shall be submitted to the Ministry and its Regional Office.
- xiv. The project proponent will also provide the latest status of the environmental compliances in respect of its existing plant.
- xv. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of conveyors/rail mode of transport wherever feasible. The company shall have separate truck parking area. Vehicular emissions shall be regularly monitored.
- xvi. Efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated wastewater shall be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge shall be adopted.
- xvii. Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources.

- xviii. Regular monitoring of influent and effluent surface, sub-surface and ground water shall be ensured and treated wastewater shall meet the norms prescribed by the State Pollution Control Board or described under the Environment (Protection) Act, 1986.
- xix. All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Spent oil and batteries shall be sold to authorized recyclers / re-processors only.
- xx. The kiln shall be provided with a flexible fuel feeding system to enable use of hazardous wastes and other wastes including biomass, etc.
- xxi. The proponent shall examine and prepare a plan for utilisation of high calorific wastes such as chemical wastes, distillation residues, refuse derived fuels, etc as alternate fuels based on availability and composition. For this, the proponent shall identify suitable industries with such wastes and enter into an MOU for long-term utilisation of such wastes as per the Environment (Protection) Rules, 1986 and with necessary approvals.
- xxii. Efforts shall be made to use the high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly. The PP shall enter into an MOU with units with potential for generating hazardous waste and in accordance with Hazardous Waste Regulations and prior approval of the MPPCB.
- xxiii. Green belt over 33% of the total project area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the project area and along road sides etc. by planting native and broad leaved species in consultation with local DFO, local community and as per the CPCB guidelines.
- xxiv. The project proponent shall provide for solar light system for all common areas, street lights, villages, parking around project area and maintain the same regularly.
- xxv. The project proponent shall provide for LED lights in their offices and residential areas.
- xxvi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.
- xxvii. At least 2.5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues, locals need and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office. Implementation of such program shall be ensured by constituting a Committee comprising of the proponent, representatives of village Panchayat and District Administration. Action taken report in this regard shall be submitted to the Ministry's Regional Office.
- xxviii. In addition to the above provision of ESC, the proponent shall prepare a detailed CSR Plan for the next 5 years including annual physical and financial targets for the existing-cum-expansion project, which includes village-wise, sector-wise (Health, Education, Sanitation, Skill Development and infrastructure etc) activities in consultation with the local communities and administration. The CSR Plan will include the amount of 2%

retain annual profits as provided for in Clause 135 of the Companies Act, 2013 which provides for 2% of the average net profits of previous 3 years towards CSR activities for life of the project. A separate budget head shall be created and the annual capital and revenue expenditure on various activities of the Plan shall be submitted as part of the Compliance Report to RO. The details of the CSR Plan shall also be uploaded on the company website and shall also be provided in the Annual Report of the company.

- xxix. A Risk Assessment Study and Disaster Preparedness and Management Plan along with the mitigation measures shall be prepared with a focus of Disaster Prevention and a copy submitted to the Ministry's Regional Office, SPCB and CPCB within 3 months of issue of environment clearance letter.
- xxx. To educate the workers, all the work places where dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.
- xxxi. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

8.9 ANY OTHER ITEM

8.9.1 Integrated Steel Plant at Motanga, Dhenkanat, Orissa by M/s MGM Steels Ltd - Extension of validity of EC [F.No.-J-11011/438/2007-IA-II(I)]

MGM Minerals Ltd. (Formerly MGM Steels Ltd.) was a company founded by the promoters of M/s. M.G. Mohanty & MGM Minerals Ltd. for setting up of 0.25 MTPA Integrated Steel Plant comprising of Sponge Iron 2,10,00TPA, Hot Metal 31,000TPA, Crude Steel 50,000TPA Power 32MW, Saleable Steel Billets 2,42,553 TPA, Pig Iron 62,000 TPA. The area of the plant is 74.39 Ha.

Environmental Clearance for this project was accorded by Ministry of Environment & Forest, Govt. of India vide their Order No:J-11011/438/2007-IA II(I), on Dt:02-02-2009. Phase-I of the project comprising 1 x 350 TPD Sponge Iron Plant was commissioned in 2011 and 1 x 8 MW Captive Power Plant through Waste Heat Recovery Boiler was commissioned in 2013. 1,25,000 TPA Steel Melt Shop is under progress.

Common plant facilities like, 132 KV GRID Connectivity, Water Supply System, Road & Drainage and other auxiliaries have been completed. Techno Commercial offers for all Equipment and Auxiliaries had been collected and evaluation is under process. Phase-I along with major common facilities for Phase –II have been completed. Following table presents the production status of the industry:

Sl No	Units	Plant Capacity (TPA) as per Environmental Clearance (EC) by MOEF	Production Capacity Completed (TPA)	Validity Extension of E.C. Required for the following

1	SPONGE IRON	2,10,000	1,05,000	1,05,000
2	HOT METAL	1,31,000	NIL	1,31,000
3	CRUDE STEEL	2,50,000	NIL	2,50,000
4	COAL WASHERY	5,00,000	NIL	5,00,000
5	POWER	32MW	8 MW	24 MW
6	BILLET	2,42,553	NIL	2,42,553
7	PIG IRON	62,000	NIL	62,000

PP mentioned that the extension of EC is required for the following reasons:

- Delay in completion of Phase-I .
- Delay in 132KV Transmission Line & Connectivity.
- Delay in R.O.W. for water drawl pipeline.
- Recession in Iron & Steel markets leading to Financial Constraints.
- Hope for improvement in market conditions
- Economic feasibility of the project can be achieved only on completion of envisaged integrated production facility.
- Already common facilities for Phase-I & Phase-II have been completed.

After detailed deliberation the Committee recommended to approve the proposal for extension of validity of EC for further period of 3 years.

8.10 CASE FOR TERMS OF REFERENCE (TOR)

8.10.1 Rolling mill of capacity 18,000 TPA for production of MS strips/ round/ square bar etc., a coal gasifier of capacity 1,750 M³/hr located at Village Duldula, Tehsil Simga, District Baloda Bazaar, (Chhattisgarh) by **M/s Earth Stahl & Alloys Pvt Ltd. [F.No-J-11011/202/2016-IA.II(I)]**.

The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. For this purpose, the project proponent submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(a), under category ‘A’ of the Schedule of EIA Notification, 2006 and appraised at the Central level.

M/s EarthStahl & Alloys Pvt. Ltd proposed to change the product from existing 3.6 MVA SFA from 10500TPA C.I lumps/Ball to 9200TPA Ferro Alloy. In addition to this it is also proposed to installed new unit of 5.4 MVA Submerged Arc Furnace for production of 13,800 TPA Ferro Alloys, Proposed Rolling Mill 18000 TPA for MS Strip/Round Bar/Square with Coal Gasifier 1750 nm³/Hr, 1 x 750 KW + 1x 2250KW Induction Furnace for 8400 TPA for Casting &

Forging/Billets /Ingots of Iron & Steel, 1x550 KW + 1x750 KW + 1x2250 KW Induction Furnace for 12000 TPA for Casting & Forging/Billets /Ingots of Iron & Steel, and Iron Ore Washing plant of 500000 TPA capacity

The proposed unit will be located at Village: Duldula , Taluka: Simga, District Baloda Bazar, State Chhattisgarh. The land is possession for the plant is 12.54 Ha out of which 4.138 Ha land will be used for green belt development. Total project cost is approx 106 Crore rupees. Proposed employment generation from proposed project will be 100 direct employment and 80 indirect employment. The proposed capacity for different products for new site area as below:

Sr. No.	Furnace Type	Description	Capacity (MT/Annunm)	Existing Products	Status	Proposed Change in Product Mix / Product of Proposed Project	Proposed New Capacity (MT/Annunm)
1	Sub-merged Arc Furnace	3.6MVA-SAF	10500	CI lumps/Balls	Existing under operation	Ferro Alloys	9200
2.	Induction Furnace	1x550 KW	3600	Castings and forging of iron & steel	Existing under operation	Castings and forging of Iron& Steel	3600
3	Induction Furnace	1x750KW 1x2250KW			Proposed	Castings and forging of Iron& Steel	8400
4	Ferro Alloys Plant (Sub-merged Arc Furnace)	5.4 MVA SAF	-	-	Proposed	Ferro Alloys	13800
5	Induction Furnace	1x550KW	-	-	Proposed	Castings & forgings of Iron & steel/Ingots/ Billets	12000
	Induction Furnace	1x750KW	-	-			
	Induction Furnace	1x2250KW	-	-			
6	Rolling Mill		-	-	Proposed	MS Strip/ Round/ Square/ Bar	18000
7	Coal Gasifier	1x1750Nm ³ /hr	-	-	Proposed	Producer Gas	1750Nm ³ /hr

8	Iron Ore Washing Plant	-	-	-	Proposed	Washed Iron Ore	500000
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The electricity load of 16.80 MW will be procured from Chhattisgarh State Power Distribution Company Ltd.

Proposed raw material and fuel requirement for project are Billets 18460MTPA, Coal 7312, Iron ore 5,00,000MTPA, Manganase ore 64350 MTPA, Coke 19132MTPA, Dolomite 8280MTPA, M.S. Scrap 22560MTPA and Pig iron 24000TPA. Requirement would be fulfill by local as well as import. Fuel consumption will be mainly electricity and coal for gasifier.

Water Consumption for the proposed project will be 320KLD and waste water generation will be 133.3KLD. Domestic waste water will be treated in packaged type STP and industrial waste water generated will be re-cycle in the respective plant.

After detailed deliberations, the Committee recommended the issue of TOR and prescribed following specific TORs, in addition to the standard TOR, for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-2 and Annexure – 11.**

- i. Public hearing to be conducted by the Jharkhand Pollution Control Board.
- ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA.I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

8.10.2 Application for prior Environment Clearance for the Alumina Refinery with a production capacity of 3 MTPA at Kusumshila in Rayagada district of odisha by **M/s Larsen & Toubro Ltd. [F. No. J-11011/218/2016-IA.II(I)]**

M/s. Larsen & Toubro Limited proposes to install a new Alumina Refinery. The proposed Alumina Refinery shall be designed to produce Smelter Grade Alumina by Bayer process and operate at a capacity of 3 million TPY in three streams of 1.0 million TPY each, including necessary balancing facilities for utilities, offsite and infrastructure. The Alumina Refinery will be located near Kusumshila village in Rayagada district and shall be based on Kutrumali and Sijimali Bauxite Deposits in Odisha. The land area required for the proposed Alumina refinery plant (including Red Mud Pond & Ash Pond, Township, Railway Corridor, R&R Colony, Mine Corridor and Mine Access & Conveyor) is 1398 Ha out of which 466 Ha land will be used for green belt development. There are no national parks/ wild life sanctuary within 10 km radius. Total estimated project cost is 13,468 Crore Indian Rupees. Proposed employment generation from proposed project will be about 1200 direct employment and about 4800 indirect employment.

The proposed capacity for different products for new site area are as below:

Name of Unit	No. of Units	Capacity of each	Production
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		Unit	Capacity
Alumina Refinery	3	1 MTPA	3 MTPA
Co-generation plant	1		200 MW

The electricity load of around 200 MW required for the Alumina Refinery plant will be met from captive co-generation plant proposed to be installed within the Refinery complex. The electric power produced from the co-generation plant shall be synchronized with grid supply such that surplus power can be banked with GRIDCO (Odisha) while minor temporary shortage will be met from the grid. For short durations, during instability of the grid, it would be possible to operate the plant in “Islanding” mode also. DG set of 16 MW capacity is also proposed to be installed for emergency purpose.

Proposed raw material requirement for Alumina Refinery plant is 9 MTPA Bauxite, which will be met from Kutrumali (3 MTPA) and Sijimali (6 MTPA) Bauxite Deposits located in Rayagada and Kalahandi districts of Odisha. Coal requirement for the captive co-generation plant is 1.8 MTPA. It is proposed to source 50% coal from Ib Valley coal mines of Odisha and rest through imports. Other fuel consumption will be mainly Furnace Oil for process requirement.

Water requirement for the proposed project is 53,000 KLD (14 MGD) and waste water generation will be nil outside the project boundary. Water demand shall be met from Nagavalli River. Water availability study has been carried out by WAPCOS. Domestic waste water will be treated through Sewage treatment plant. Industrial waste water generated will be treated in the Effluent Treatment Plant & through reverse Osmosis plant and reused in the process. ETP Sludge shall be disposed as per applicable hazardous waste management rules.

The Committee has decided that the site selection criteria and the site suggested by the proponent should be revisited. The present site selected by the proponent are very close to the forest area with dense forests (as seen on google map). Therefore, it was suggested by the Committee that feasibility of more sites should be studied and a site which is reasonably away from the forest lands with dense forests should be selected by the proponent. Therefore, the Committee recommended to defer the proposal till the information regarding suitability of other sites is submitted to the Ministry.

8.10.3 Application for Environmental Clearance for the proposed expansion of steel melting plant by **M/s Arun Smelters Pvt. Ltd.** located at Plot No. B 16 & 17, SIPCOT's Industrial Complex, Pappankuppam Village, Gummidipoondi Taluk, Tiruvallur District.
[F. No. J-11011/217/2016-IA.II(I)]

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant gave a detailed presentation on the salient features of the project. The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. The project proponent submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(a), under category ‘A’ of the Schedule of EIA Notification, 2006 and appraised at the Central level.

M/s. Arun Smelters Private Limited is operating their steel manufacturing plant at Plot Nos. B 16 & 17 of SIPCOT's Industrial Complex, Gummidipoondi Taluk, Tiruvallur District, Tamilnadu. In 1995, the industry started the commercial production by installing an induction furnace to produce MS Ingots. Later in 2014, the industry installed a concaster to produce MS Billets. The present production capacity of the plant is 1600 TPM of MS Billets. The CTO for the same is renewed up to September 30, 2016.

The proposed expansion of steel melting plant is to increase the production capacity from 1600 TPM (19,200 TPA) to 7100 TPM (85,200 TPA). The major plant facilities proposed for the expansion project are replacement of 1 x 6.5 MT induction furnace by 2 x 8 MT & 1 x 7 MT of induction furnaces. The proposed expansion takes place within the existing plant premise of 1.45 Ha (3.58 acres), no additional land will be acquired for the expansion project. For green belt development 0.48 Ha of land will be provided. The total cost of the proposed expansion project is about Rs. 400 Lakhs.

The project site is located in Plot Nos. B 16 & 17 of SIPCOT's Industrial Complex, Gummidipoondi Taluk, Tiruvallur District, Tamilnadu. The nearest highway is National Highway (NH-5) connecting Guntur-Chennai which is located at 0.6 km in East direction. Also the site is located at about 5.8 km, North from (Andhra Pradesh - Tamilnadu) State Boundary. The nearest railway station is Gummidipoondi R.S., which is at a distance of about 1.2 km in SE direction. The nearest airport is Chennai International Airport (47.2 km, South). Pulicat Lake (Eco-Sensitive Zone) is located a distance of about 9.8 km in NNE direction. The project site is not near to the places of archaeological importance, defense installations or resettlement and rehabilitation.

The major raw materials required for the proposed expansion project are MS Scrap (74,029 TPA), Sponge Iron (8,710 TPA) and Silico Manganese (4,167 TPA). The entire power requirement of 6.7 MVA, which is being sourced from TANGEDCO. The total water required for the proposed expansion is 40 KLD. Water requirement in the plant is for concast cooling, scrubber make-up, induction coil cooling and domestic usages. The manpower requirement in the existing plant is 25 No's. After the proposed expansion it will be increased to 49 No's which includes officers, workers and supervisors.

After detailed deliberations, the Committee recommended the issue of TOR and prescribed following specific TORs, in addition to the standard TOR, for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-2 and Annexure – 11.**

- i. Public hearing to be conducted by the Tamil Nadu Pollution Control Board.
- ii. The issues raised during public hearing and commitment of the project proponent on the same along with time bound action plan to implement the commitment and financial allocation thereto should be clearly provided.
- iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA.I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

8.10.4 Expansion of Existing Ferro Alloys Plant by additional installation of 4 X 9 MVA capacity Sub Merged Arc Furnace for production of either or combination of High Carbon Ferro Chrome 66,000 TPA, Ferro Manganese 80,000 TPA & Silico Manganese

60,000 TPA at village Pankapal, Tehsil Sukinda, Dist Jajpur, Odisha by **M/s Misrilall Mines Pvt. Ltd.**, Ferro Alloys Division. [F. No. J-11011/307/2011-IA.II(I)]

The proposal was considered by the Expert Appraisal Committee and the project proponent and their EIA-EMP consultant gave a detailed presentation on the salient features of the project. The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. The project proponent submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(a), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central level.

M/s Misrilall Mines Private Limited, Ferro Alloys Division proposes to install additional 4 X 9 MVA capacity Sub Merged Arc Furnace for production of either or combination of High Carbon Ferro Chrome, Ferro Manganese & Silico Manganese. It is proposed to be set up the plant for expansion of Ferro Alloys Plant based on in house technology. The proposed expansion will be installed within the premises of existing plant (1 X 4.5 MVA capacity SAF having production capacity of 15,000 TPA of High Carbon Ferro Chrome), located at village Pankapal, Taluka/Tehsil : Sukinda, District Jajpur, Odisha. The land area already acquired for the project is 49.36 Acres or 19.975 Ha, out of which 6.475 Ha land will be used for green belt development. Total project cost (expansion) is approx 75.00 Crore rupees. Proposed employment generation from proposed project will be 480 both direct employment and indirect employment. The proposed capacity for different products for new site area as below.

Name of Unit	No of Units	Capacity of each Unit	Production Capacity
High Carbon Ferro Chrome	4	9 MVA	66,000 TPA
Ferro Manganese			80,000 TPA
Silico Manganese			60,000 TPA

The electricity load of 31.78 MW will be procured from State Electricity Grid. Company has also proposed to install 1 X 500 KVA DG set as standby. Water Consumption for the proposed project will be 125M³/day which will be sourced from Ground water and partially from Rain Water Harvesting Pond. There is no provision of recycling of any water in the system. There is recirculation of Water in the process.

Proposed raw material and fuel requirement for project are Chrome Ore, Manganese Ore, Reducing Agents, Fluxes and Carbon Electrode Paste etc. Requirement of Chrome Ore would be fulfilled by Own Chromite Mines located at Sukinda, Manganese Ore from Local Markets and others from local markets. Fuel consumption will be mainly 10 KL of HSD and 20,000 KL of Fuel oil.

Earlier the proposal was considered by the Expert Appraisal Committee (EAC) in its 35th meeting held during 26th -27 March, 2015 and in the 45th EAC meeting held on 11th -12th August, 2015. After detailed deliberations, the EAC (I) recommended the project for Environmental Clearance. However, while processing the file for grant of EC it was observed that the ToR for the proposal was awarded by MoEFCC vide letter No. J-11011/307/2011-IA.II(I) 12th August, 2011 for preparation of EIA/EMP report. The validity period of ToR was extended for a period

of one year upto 10th August, 2014 and a letter was issued by the Ministry. However the EIA EMP report has been submitted by the PP through online application on 18th February, 2015, i.e. after the expire of ToRs. Therefore the Ministry decided to consider the proposal afresh.

After detailed deliberations, the Committee recommended the issue of TOR and prescribed following specific TORs, in addition to the standard TOR, for undertaking detailed EIA-EMP study in addition to the generic TOR enclosed at **Annexure I read with additional TORs at Annexure-2 and Annexure – 11.**

- i. Public hearing is exempted for the project.
- ii. The project proponent has to collect one month data and a comparison of the present data should be presented in the EIA report w.r.t the earlier data collected.
- iii. The project proponent should carry out social impact assessment of the project as per the Office Memorandum No. J-11013/25/2014-IA.I dated 11.08.2014 issued by the Ministry regarding guidelines on Environment Sustainability and CSR related issues. The social impact assessment study so carried out should form part of EIA and EMP report.

8.10.5 Addition of three Induction furnaces (15 MT each) along with concast to produce 67500 MTPA of Billets (in existing Galvanizing (G.I.) Pipe Plant along with 45000 MT capacities of rolled products by **M/s Padmavati Steels Limited** at Village Johron Trilokpur Road Kala Amb, Tehsil Nahan and Dist. Sirmaur. Himachal Pradesh [**F. No. J-11011/216/2016-IA.II(I)**]

The proposal was considered by the Expert Appraisal Committee to determine Terms of Reference (TORs) for undertaking detailed EIA and EMP study for the purpose of obtaining Environment Clearance in accordance with the provisions of EIA Notification, 2006, as amended. The project proponent submitted information in prescribed format (Form-I) along with the pre-feasibility report. The proposed project activity is listed at S.No. 3(a), under category 'A' of the Schedule of EIA Notification, 2006 and appraised at the Central level. Also the interstate boundary is at a distance of 1 Km from project site.

M/s Padmavati Steels Limited proposes for addition of three Induction furnaces (15 MT each) along with concast to produce 67500 MTPA of Billets (in existing Galvanizing (G.I.) Pipe Plant along with 45000 MT capacities of rolled products. It is proposed set up the plant for production of 67500 MTPA of MS Billets Based on Induction Furnace technology. The proposed unit will be located at Village Johran Trilokpur Road Kala Amb, Tehsil Nahan, Dist. Sirmaur, Himachal Pradesh The land area acquired for the integrated steel plant is 4.77 Ha out of which 1.57 Ha land will be used for green belt development. The total project cost is approx.37.36 Crore rupees. Proposed employment generation from proposed project will be 302 direct employment and approx 350 indirect employments. The proposed capacity for different products for new site area as below:

S.No.	Particulars	Existing Unit	Proposed Unit	Total
1.	Induction Furnace	--	3 (15 MT each)	3 (15 MT each)
2.	Rolling Mill	36000	45000	81000
3.	Billets	--		67500
4.	Land Area	2.25 ha	2.52 ha	4.77 ha

The electricity load of 9.8MW will be procured from Himachal Pradesh State Electricity Board (HPSEB) Company has also proposed to install 125 KVA DG Set. Water consumption for the proposed project will be 14 KL/day and waste water generation will be mainly from cooling will be reused within the plant premises Domestic waste water will be treated will be send to septic tank / soak pit.

Proposed raw material and fuel requirement for project are Scrap 70875MT, Silico Manganese 1063.125MT, Aluminum Shots 708.750 MT, G I Moulds 2126.250MT and Zinc 8.700 MT Requirement would be fulfil by the local industries as well as by the adjoining states. There is no Fuel consumption

The proposal was discussed at length by the Committee. The Committee opined that there are several technical flaws in the proposal which could not be explained by the project proponent. Therefore the Committee recommended to defer the proposal. The same shall be considered once the revised corrected proposal is received.

Executive Summary

Executive summary of the report in about 8-10 pages incorporating the following:

- i. Project name and location (Village, Dist, State, Industrial Estate (if applicable))

- ii. Products and capacities. If expansion proposal then existing products with capacities and reference to earlier EC.
- iii. Requirement of land, raw material, water, power, fuel, with source of supply (Quantitative)
- iv. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes.
- v. Measures for mitigating the impact on the environment and mode of discharge or disposal.
- vi. Capital cost of the project, estimated time of completion
- vii. Site selected for the project – Nature of land – Agricultural (single/double crop), barren, Govt/private land, status of its acquisition, nearby (in 2-3 km.) water body, population, with in 10km other industries, forest , eco-sensitive zones, accessibility, (note – in case of industrial estate this information may not be necessary)
- viii. Baseline environmental data – air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
- ix. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
- x. Likely impact of the project on air, water, land, flora-fauna and nearby population
- xi. Emergency preparedness plan in case of natural or in plant emergencies
- xii. Issues raised during public hearing (if applicable) and response given
- xiii. CSR plan with proposed expenditure.
- xiv. Occupational Health Measures
- xv. Post project monitoring plan

ANNEXURE –I

GENERIC TERMS OF REFERENCE (TOR) IN RESPECT OF INDUSTRY SECTOR

- 1. Executive Summary

2. Introduction
 - i. Details of the EIA Consultant including NABET accreditation
 - ii. Information about the project proponent
 - iii. Importance and benefits of the project

3. Project Description
 - i. Cost of project and time of completion.
 - ii. Products with capacities for the proposed project.
 - iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
 - iv. List of raw materials required and their source along with mode of transportation.
 - v. Other chemicals and materials required with quantities and storage capacities
 - vi. Details of Emission, effluents, hazardous waste generation and their management.
 - vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
 - viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided
 - ix. Hazard identification and details of proposed safety systems.
 - x. Expansion/modernization proposals:
 - a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB shall be attached with the EIA-EMP report.
 - b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4. Site Details
 - i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
 - ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
 - iii. Co-ordinates (lat-long) of all four corners of the site.
 - iv. Google map-Earth downloaded of the project site.
 - v. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.

- vi. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- vii. Landuse break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)
- viii. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area
- ix. Geological features and Geo-hydrological status of the study area shall be included.
- x. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)
- xi. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xii. R&R details in respect of land in line with state Government policy

5. **Forest and wildlife related issues (if applicable):**

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable).
- ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (*in case of projects involving forest land more than 40 ha*).
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon.
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife

6. **Environmental Status**

- i. Determination of atmospheric inversion level at the project site and site-specific micro-meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with – min., max., average

- and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (60m upstream and downstream) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
 - v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC.
 - vi. Ground water monitoring at minimum at 8 locations shall be included.
 - vii. Noise levels monitoring at 8 locations within the study area.
 - viii. Soil Characteristic as per CPCB guidelines.
 - ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
 - x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
 - xi. Socio-economic status of the study area.

7. Impact Assessment and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be well assessed. Details of the model used and the input data used for modeling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling – in case, if the effluent is proposed to be discharged in to the local drain, then Water Quality Modelling study should be conducted for the drain water taking into consideration the upstream and downstream quality of water of the drain.
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control
- vii. Details of hazardous waste generation and their storage, utilization and disposal. Copies of MOU regarding utilization of solid and hazardous waste shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.

- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.
- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8. Occupational health

- i. Details of existing Occupational & Safety Hazards. What are the exposure levels of above mentioned hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of abovementioned parameters as per age, sex, duration of exposure and department wise.
- iii. Annual report of health status of workers with special reference to Occupational Health and Safety.
- iv. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.

9. Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
- iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
- iv. Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.
11. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.
12. 'A tabular chart with index for point wise compliance of above TORs.
13. The TORs prescribed shall be valid for a period of three years for submission of the EIA-EMP reports along with Public Hearing Proceedings (wherever stipulated).

The following general points shall be noted:

- i. All documents shall be properly indexed, page numbered.
- ii. Period/date of data collection shall be clearly indicated.
- iii. Authenticated English translation of all material in Regional languages shall be provided.
- iv. The letter/application for environmental clearance shall quote the MOEF file No. and also attach a copy of the letter.
- v. The copy of the letter received from the Ministry shall be also attached as an annexure to the final EIA-EMP Report.
- vi. The index of the final EIA-EMP report must indicate the specific chapter and page no. of the EIA-EMP Report
- vii. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MOEF vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry shall also be followed.
- viii. The consultants involved in the preparation of EIA-EMP report after accreditation with Quality Council of India (QCI) /National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA-EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. Name of the Consultant and the Accreditation details shall be posted on the EIA-EMP Report as well as on the cover of the Hard Copy of the Presentation material for EC presentation.
- ix. TORs' prescribed by the Expert Appraisal Committee (Industry) shall be considered for preparation of EIA-EMP report for the project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. Where the documents provided are in a language other than English, an English translation shall be provided. The draft EIA-EMP report shall be submitted to the State Pollution Control Board of the concerned State for conduct of Public Hearing. The SPCB shall conduct the Public Hearing/public consultation, district-wise, as per the provisions of EIA notification, 2006. The Public Hearing shall be chaired by an Officer not below the rank of Additional District Magistrate. The issues raised in the Public Hearing and during the consultation process and the commitments made by the project proponent on the same shall be included separately in EIA-EMP Report in a separate chapter and summarised in a tabular chart with financial budget (capital and revenue) along with time-schedule of implementation for complying with the commitments made.

The final EIA report shall be submitted to the Ministry for obtaining environmental clearance.

ANNEXURE-2

ADDITIONAL TORS FOR INTEGRATED STEEL PLANT

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
3. For Large ISPs, a 3-D view i.e. DEM (Digital Elevation Model) for the area in 10 km radius from the proposal site. MRL details of project site and RL of nearby sources of water shall be indicated.
4. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
5. PM(PM₁₀ and P_{2.5}) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM₁₀ to be carried over.
6. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
7. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
8. Plan for slag utilization
9. Plan for utilization of energy in off gases (coke oven, blast furnace)
10. System of coke quenching adopted with justification.
11. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
12. Trace metals in waste material especially slag.
13. Trace metals in water

ANNEXURE-3

ADDITIONAL TORS FOR PELLET PLANT

1. Iron ore/coal linkage documents along with the status of environmental clearance of iron ore and coal mines
 2. Quantum of production of coal and iron ore from coal & iron ore mines and the projects they cater to. Mode of transportation to the plant and its impact
 3. Recent land-use map based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
 4. PM(PM_{10} and $P_{2.5}$) present in the ambient air must be analysed for source analysis – natural dust/RSPM generated from plant operations (trace elements) of PM_{10} to be carried over.
 5. All stock piles will have to be on top of a stable liner to avoid leaching of materials to ground water.
 6. Plan for the implementation of the recommendations made for the steel plants in the CREP guidelines.
 7. Plan for slag utilization
 8. Plan for utilization of energy in off gases (coke oven, blast furnace)
 9. System of coke quenching adopted with justification.
 10. Trace metals Mercury, arsenic and fluoride emissions in the raw material.
 11. Trace metals in waste material especially slag.
 12. Trace metals in water
-

ANNEXURE-4

ADDITIONAL TORs FOR CEMENT INDUSTRY

1. Limestone and coal linkage documents along with the status of environmental clearance of limestone and coal mines
 2. Quantum of production of coal and limestone from coal & limestone mines and the projects they cater to;
 3. Present land use shall be prepared based on satellite imagery. High-resolution satellite image data having 1m-5m spatial resolution like quickbird, Ikonos, IRS P-6 pan sharpened etc. for the 10 Km radius area from proposed site. The same shall be used for land used/land-cover mapping of the area.
 4. If the raw materials used have trace elements, an environment management plan shall also be included.
 5. Plan for the implementation of the recommendations made for the cement plants in the CREP guidelines must be prepared.
 6. Energy consumption per ton of clinker and cement grinding
 7. Provision of waste heat recovery boiler
 8. Arrangement for co-processing of hazardous waste in cement plant.
 9. Trace metals in waste material especially slag.
-

ADDITIONAL TORs FOR PULP AND PAPER INDUSTRY

- i. A note on pulp washing system capable of handling wood pulp shall be included.
- ii. Manufacturing process details for the existing and proposed plant shall be included. Chapter on Pulping & Bleaching shall include: no black liquor spillage in the area of pulp mill; no use of elemental chlorine for bleaching in mill; installation of hypo preparation plant; no use of potcher washing and use of counter current or horizontal belt washers. Chapter on Chemical Recovery shall include: no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE directly to ETP; control of suspended particulate matter emissions from the stack of fluidized bed recovery boiler and ESP in lime kiln
- iii. Studies shall be conducted and a chapter shall be included to show that Soda pulping process can be employed for *Eucalyptus/Casuarina* to produce low kappa (bleachable) grade of pulp.
- iv. Commitment that only elemental Chlorine-free technology will be used for the manufacture of paper and existing plant without chemical recovery plant will be closed within 2 years of issue of environment clearance.
- v. A commitment that no extra chlorine base bleaching chemicals (more than being used now) will be employed and AOx will remain within limits as per CREP for used based mills. Plan for reduction of water consumption.

LEATHER/SKIN/HIDE PROCESSING INDUSTRY

1. Justification for engaging a particular type of process (raw hide/skin into semi finishing or finished leather, semi finished leather to finished leather, dry finishing operations, chrome/vegetable tanning, *etc.*).
2. Details regarding complete leather/ skin/ hide processing including the usage of sulfides, nitrogen compounds, chromium or other tanning agents, post-tanning chemicals, biocides, *etc.*, along with the material balance shall be provided.
3. In case of chrome tanning, details of the chrome recovery plant, management of shavings/solid waste including safe disposal.
4. Details on reuse of soak liquor / saline stream from membrane system, if applicable, to the extent possible in pickling activity after required treatment. Also, mention the salt recovery measures.

COKE OVEN PLANT

1. Justification for selecting recovery/non-recovery (beehive) type batteries with the proposed unit size.
2. Details of proposed layout clearly demarcating various facilities such as coal storages, coke making, by-product recovery area, *etc* within the plant.
3. Details of coke oven plant (recovery/non-recovery type) including coal handling, coke oven battery operations, coke handling and preparation.
4. Scheme for coal changing, charging emission centre, Coke quenching technology, pushing emission control.
5. Scheme for coke oven effluent treatment plant details including scheme for meeting cyanide standard.

ASBESTOS MILLING AND ASBESTOS BASED PRODUCTS

1. Type of the project – new/expansion/modernization
2. Type of fibres used (Asbestos and others) and preference of selection from techno-environmental angle should be furnished
3. As asbestos is used in several products and as the level of precautions differ from milling to usage in cement products, friction products gasketing, textiles and also differ with the process used, it is necessary to give process description and reasons for the choice for selection of process
4. Technology adopted, flow chart, process description and layout marking areas of potential environmental impacts
5. National standards and codes of practice in the use of asbestos particular to the industry should be furnished
6. In case of newly introduced technology, it should include the consequences of any failure of equipment/ technology and the product on environmental status.
7. In case of expansion project asbestos fibre to be measured at slack emission and work zone area, besides base line air quality.
8. In case of green field project asbestos fibre to be measured at ambient air.

INDUCTION/ARC FURNACES/CUPOLA FURNACES 5TPH OR MORE

1. Details of proposed layout clearly demarcating various units within the plant.
2. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs and outputs (material and energy balance).
3. Details on design and manufacturing process for all the units.
4. Details on environmentally sound technologies for recycling of hazardous materials, as per CPCB Guidelines, may be mentioned in case of handling scrap and other recycled materials.
5. Details on requirement of raw materials, its source and storage at the plant.
6. Details on requirement of energy and water along with its source and authorization from the concerned department. Location of water intake and outfall points (with coordinates).
7. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
8. Details on toxic content (TCLP), composition and end use of chrome slag. Details on the recovery of the Ferro chrome from the slag and its proper disposal.

METALLURGICAL INDUSTRY (FERROUS AND NON-FERROUS)

1. Complete process flow diagram describing each unit, its processes and operations, along with material and energy inputs & outputs (material and energy balance).
2. Emission from sulphuric acid plant and sulphur muck management.
3. Details on installation of Continuous Emission Monitoring System with recording with proper calibration system
4. Details on toxic metals including fluoride emissions
5. Details on stack height.
6. Details on ash disposal and management
7. Complete process flow diagram describing process of lead/zinc/copper/ aluminium, *etc.*
8. Details on smelting, thermal refining, melting, slag fuming, and Waelz kiln operation
9. Details on Holding and de-gassing of molten metal from primary and secondary aluminum, materials pre-treatment, and from melting and smelting of secondary aluminium
10. Details on toxic metal content in the waste material and its composition and end use (particularly of slag).
11. Trace metals in waste material especially slag.
12. Plan for trace metal recovery
13. Trace metals in water

Air Pollution

Plant /Unit	Pollutants	Qty generated	Method used to Control/ and specifications/attach Separate Sheet to furnish Details	Number of units planned & Capacity	Budget	Estimated Post Control Qty of Pollutant	
						Per Unit	Per Day

**LIST OF PARTICIPANTS OF EAC (I) IN 8th MEETING OF EAC (INDUSTRY-I) HELD
ON 27th – 28th JUNE, 2016**

S.No	Name and Address	Position	Attendance	Signature
1	Dr.Chhavi Nath Pandey, IFS(Retired)	Chairman	P	
Members				
2.	Director, Central Pulp and Paper Research Institute	Member	P	
3.	Director, Central Leather Research Institute	Member	A	
4.	Representative of Indian Meteorological Department	Member	A	
5.	Representative of Central Ground Water Board	Member	A	
6.	Dr. G. Bhaskar Raju	Member	P	
7.	Prof. Naresh Chandra Pant	Member	A	
8.	Dr. Jagdish Kishwan, IFS(Retired)	Member	P	
9.	Dr.G.V.Subrahmanyam	Member	P	
10.	Prof. Arun Pandey	Member	P	
11.	Shri Santosh Raghunath Gondhalekar	Member	P	
12.	Shri Ashok Upadhyay	Member	P	
13.	Shri Vijay Prakash Saha	Member	P	
14.	Dr.Satish C.Garkoti	Member Secretary	P	
